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PREFACE

INDIA—A Reference Annual was first brought out in 1953 with the object of providing authentic information on the diverse aspects of our national life and activities. The encouraging response, both within the country and abroad, has led to a widening of the scope of the *Annual* in successive issues.

The *Annual* contains the latest information available from official and other authoritative sources relating to each subject covered in it. It does not, however, claim to be exhaustive. The volume, in fact, has been somewhat reduced in size in the interest of economy necessitated by the National Emergency. The usual size will be restored when circumstances permit.

Among the departures from the earlier editions are that the four separate chapters on 'Constitution', 'Legislature', 'Executive' and 'Judiciary' have been abridged and put together in a single chapter entitled 'Government'. The chapter on 'Relief and Rehabilitation' has been incorporated into the chapter on 'Social Welfare'. The chapter on 'States and Union Territories' does not contain the usual full lists of the members of State Legislatures. The detailed lists are available in *India 1962*; the 1963 edition noticed only the changes that had occurred up to May 31, 1963, and the present volume includes changes from June 1, 1963 to May 31, 1964. Some of the Appendices and the Select Bibliography appearing in earlier editions have been dropped. On the other hand, the scope of the chapter on 'India and International Organisations' has been widened, and the chapter is now entitled 'India and the World'.

Attention is invited to the Appendix on the National Emergency, including a chronicle of events, relating to the Sino-Indian dispute, from January 1962 to the end of April 1964.

Over the past few years, India has been gradually adopting the metric system of weights and measures (*see* p. 304). The data in the *Annual* have therefore been given in the metric system wherever available. For conversion, equivalents of some of the more important weights and measures are given at the end of the Appendices.

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joins the Ganga at Allahabad. Of the rivers flowing north from Central India into the Yamuna or the Ganga, mention may be made of the Chambal, the Betwa and the Sone.

The second largest river basin in India is that of the Godavari. It covers an area which comprises about 10 per cent of the total area of India. The basins of the Brahmaputra in the east and the Indus in the west are of about the same size. The Krishna basin is the second largest in Peninsular India. The Mahanadi flows through the third largest basin in the Peninsula. The basins of the Narmada in the uplands of the Deccan and of the Kaveri in the far south are of about the same size, though of different character and shape.

The two other river systems, which are small but nevertheless agriculturally very important, are those of the Tapi in the north and the Pennar in the south.

Climate

The India Meteorological Department recognises four seasons : (i) the Cold Weather Season (December-March); (ii) the Hot Weather Season (April-May); (iii) the Rainy Season (June-September); and (iv) the Season of the retreating south-west monsoon (October-November).

There are four broad climatic regions based on rainfall. Practically the whole of Assam and the West Coast of India lying at the foot of the Western Ghats and extending from the north of Bombay to Trivandrum are areas of very heavy rainfall. In contrast to these, the Rajasthan desert extending to Kutch, and the high Ladakh plateau of Kashmir extending westward to Gilgit are regions of low precipitation. In between these areas at the extreme ends of the rainfall range are two areas of moderately high and low rainfall respectively. The former consists of a broad belt in the eastern part of the Peninsula merging northward with the north India plains and southward with the eastern coastal plains. The latter comprises a belt extending from the Punjab plains across the Vindhya mountains into the western part of the Deccan, widening considerably in the Mysore plateau.

POWER RESOURCES

Coal

In India coal occurs mainly in formations of Gondwana and Tertiary ages. The reserves of coal occurring in seams of one foot or more in thickness down to a depth of 2,000 ft. are estimated at 11,945 crore tons. Rich deposits (about 11 crore tons) of coal with high coking index have recently been discovered in Chano Rikba block of north Karanpura coalfield. New seams have also been discovered in Singrauli, Ramgarh and Raniganj coalfields.

Lignite

Lignite occurs in Madras, Rajasthan, Gujarat and Kashmir. Of the total estimated reserves of nearly 213 crore tons in these areas the deposits in and around Neyveli in South Arcot district of Madras are of the order of 200 crore tons.

Oil

A tentative estimate places the potential oil-bearing areas in India at 4,00,000 sq. miles comprising Assam, Tripura, Manipur, West Bengal basin, Punjab, Himachal Pradesh, Jammu and Kashmir, Rajasthan, Cambay-Kutch, Ganga Valley, Madras coast, Andhra coast, Kerala coast and the Andaman and Nicobar Islands. However, the country's oil reserves can be estimated only in the light of the extensive programme of oil exploration which is now in progress.

Water Power

Power potential studies of the river basins of India indicate an aggregate hydro-electric potential of the order of 411 lakh kw at sixty per cent load factor.

MINERAL RESOURCES

Iron Ore

The iron ore reserves in India, assessed at one-fourth of the total world reserves, are estimated at 2,100 crore tons. Large deposits of hematite ores are known in Bihar, Orissa, Madhya Pradesh, Mysore and Maharashtra, magnetic ores occurring in Madras, Bihar, Orissa and Himachal Pradesh. Extensive spathic (carbonate) ores are present in West Bengal. The proved and indicated reserves of all types of ores amount to about 710 crore tons.

Manganese

India ranks third in the world in respect of manganese deposits. About 14 crore tons of a total estimated reserve of 18 crore tons are in Madhya Pradesh, Gujarat and Maharashtra.

Chromite

Chromite occurs mainly in Bihar, Orissa, Mysore, Madras and Maharashtra. The total reserves, proved and probable, have been estimated at 49 lakh tons.

Refractories

Occurrences of magnesite have been reported from a number of places in Andhra Pradesh, Madras, Mysore, Rajasthan and Uttar Pradesh. The total reserves have so far been estimated at 11,68 lakh tons. Fire-clays occur in almost all States, those of Orissa, Bihar and Bengal being the most important. The largest deposits of kyanite occur in Bihar. Other States where kyanite occurs are Andhra Pradesh, Mysore, Maharashtra, Rajasthan and Orissa. Workable deposits of sillimanite occur in Assam. It also occurs in Kerala, Madhya Pradesh and Mysore. Corundum is found in Assam, Madhya Pradesh, Mysore and Rajasthan, the reserves in Madhya Pradesh alone being of the order of 4 lakh tons including 1 lakh tons of high grade mineral.

Gold

Proved reserves of gold ore in the Kolar Gold Fields of Mysore are 37 lakh tons while those of Hutti gold mines in Raichur district are 5 lakh tons. Gold also occurs at Ramgiri in Andhra Pradesh where detail proving work is in progress.

Copper

There are two important copper belts in India, viz., Singhbhum in Bihar and Khetri and Daribo in Rajasthan. Reserves of 3.56 crore tons with 1 per cent content have recently been proved in the Khetri area while probable reserves are placed at 9.8 crore tons. Reserves of about 2.07 crore tons with 0.8 per cent copper content and above have been estimated in Roam Sidheswar area in Singhbhum.

Lead-Zinc

Zawar mine in Udaipur district of Rajasthan is the only potential source of lead-zinc ores in the country. Reserves of ore in the central zone of Mochia Mangra hill of this mine are estimated at 80 lakh to one crore tons.

Bauxite

The occurrence of bauxite is widespread in India. The chief deposits occur in Bihar, Jammu, Madhya Pradesh, Madras, Maharashtra, Mysore, Orissa and Gujarat which together hold probable reserves of about 25,00 lakh tons. High grade bauxite reserves are estimated at 7,40 lakh tons.

Mica

Mica is available in three mica belts of about 1,500 sq. miles in Bihar, 1,200 sq. miles in Rajasthan and 600 sq. miles in Andhra Pradesh. The best quality of mica, perhaps the best in the world, comes from Bihar.

Ilmenite

Workable deposits occur in the beach sands of the eastern and western coasts in India, those on the Kerala coast being known for their extensive occurrence. India's reserves of ilmenite in beach sands have been reckoned at 38,00 lakh tons.

Salt

Salt is mainly derived from the sea (along the coastal region, mostly in Gujarat, Maharashtra and Madras), inland lakes (in Rajasthan and Gujarat) and to a very small extent from rock salt deposits (in Himachal Pradesh).

Gypsum

Rajasthan contains the largest reserves of 92 crore tons of gypsum out of the country's total reserves of 99.8 crore tons. Other States in which deposits are located are Madras, Uttar Pradesh, Andhra Pradesh, Himachal Pradesh and Jammu and Kashmir.

Miscellaneous Minerals

Other minerals like apatite, asbestos, barytes, feldspar, garnet, quartz, saltpetre, steatite, limestone, etc., are also mined in various parts of the country. Reserves of apatite-bearing rocks are placed at 7 lakh tons in Bihar, 80 lakh tons in Madras and 1.6 lakh tons in Andhra Pradesh. Reserves of bentonite clay at Barmer are estimated at one crore tons. Pyrites deposits occur at Amjor in Shahabad district of Bihar where reserves of 38.5 crore tons averaging 40 per cent sulphur are estimated. Proved reserves of 20 lakh tons of pyrites averaging 20-30 per cent sulphur are located at Ingaldhal in Mysore.

THE DEMOGRAPHIC BACKGROUND*

In 1951, India's total population was 36,09,50,365. According to the 1961 census it is 43,90,72,582†, which shows an increase of 21.64 per cent during the ten years. Table 1 shows the growth of population since 1901.

Table 2 gives the area, population and density of population in India and the component States and Union Territories. Madhya Pradesh, covering an area of 1,71,217 sq. miles is the largest and Uttar Pradesh, with 7,37,46,401 inhabitants, is the most populous State. The Union Territory of Delhi has the highest density of population accounting for 4,640 persons per sq. mile.

Table 3 shows the area, headquarters and population of districts.

*Population figures in this chapter and elsewhere in this publication are based on the 1961 census. There are aspects of the Demographic Background in respect of which the results are not available. In all such cases, information based on the 1951 census has been provided.

†The 1951 census covered Sikkim also. Its population (1,62,189) is not included in this figure.

TABLE 1
GROWTH OF POPULATION (1901-1961)

	1901	1911	1921	1931	1941	1951	1961
INDIA	23,83,37,313	25,20,05,470	25,12,39,492	27,88,67,430	31,85,39,060	36,09,50,365	43,90,72,582
<i>States</i>							
Andhra Pradesh	1,90,65,921	2,14,47,412	2,14,20,448	2,42,03,573	2,72,89,340	3,11,15,259	3,59,83,447
Assam	37,12,638	43,33,826	51,57,789	61,65,612	74,03,396	88,30,732	1,22,09,330*
Bihar	2,73,14,210	2,83,16,916	2,81,29,208	3,13,49,892	3,51,74,146	3,87,86,184	4,64,55,610
Gujarat	90,94,748	98,03,587	1,01,74,989	1,14,89,828	1,37,01,551	1,62,62,657	2,06,33,350
Jammu and Kashmir	21,39,362	22,92,535	24,24,359	26,70,208	29,46,728	32,53,852	35,60,976
Kerala	63,96,262	71,47,673	78,02,127	95,07,050	1,10,31,541	1,35,49,118	1,69,03,715
Madhya Pradesh	1,68,60,768	1,94,40,965	1,91,71,750	2,13,55,657	2,39,90,608	2,60,71,637	3,23,72,408
Madras	1,92,52,630	2,09,02,616	2,16,28,518	2,34,72,099	2,62,67,507	3,01,19,047	3,36,86,953
Maharashtra	1,93,91,643	2,14,74,523	2,08,49,666	2,39,59,300	2,68,32,758	2,90,02,564	3,95,53,718
Mysore	1,30,54,754	1,35,25,251	1,33,77,599	1,46,32,992	1,62,55,368	1,91,91,956	2,35,86,772
Nagaland	1,01,550	1,49,038	1,58,801	1,78,844	1,89,641	2,12,975	3,69,200
Orissa	1,03,02,917	1,13,78,875	1,11,58,586	1,24,91,056	1,37,67,988	1,46,45,946	1,75,48,846
Punjab	1,32,65,860	1,19,45,019	1,24,65,009	1,36,66,876	1,61,01,189	1,61,34,890	2,03,06,812
Rajasthan	1,02,94,090	1,09,83,509	1,02,92,648	1,17,47,974	1,38,63,859	1,59,70,774	2,01,55,602
Uttar Pradesh	4,86,25,310	4,81,52,273	4,56,69,865	4,97,76,754	5,65,31,848	6,32,15,742	7,37,46,401
West Bengal	1,69,40,088	1,79,98,769	1,74,74,348	1,88,97,036	2,32,29,552	2,62,99,980	3,49,26,279
<i>Union Territories</i>							
Andaman & Nicobar Islands	24,649	26,459	27,086	29,463	33,768	30,971	63,548
Delhi	4,05,819	4,13,851	4,88,452	6,36,246	9,17,939	17,44,072	26,58,612
Himachal Pradesh	8,44,270	8,76,562	8,90,046	9,54,276	10,57,711	11,09,466	13,51,144
Laccadive, Minicoy and Amin-divi Islands	13,882	14,555	13,637	16,040	18,355	21,035	24,108
Manipur	2,84,465	3,46,222	3,84,016	4,45,606	5,12,069	5,77,635	7,80,037
Tripura	1,73,325	2,29,613	3,04,437	3,82,450	5,13,010	6,39,029	11,42,005
Dadra and Nagar Haveli	24,280	29,020	31,048	38,260	40,441	41,532	57,963
Goa, Daman and Diu	5,07,518	5,19,222	5,00,904	5,41,710	5,83,736	5,96,059	6,26,667
Pondicherry	2,46,354	2,57,179	2,44,156	2,58,628	2,85,011	3,17,253	3,69,079

*Including N.E.F.T.

NATIONAL SONG

At the same time as the National Anthem was adopted, it was decided that Bankim Chandra Chatterjee's *Vande Mataram*, which was a source of inspiration to the people in their struggle for freedom, shall have an equal status with *Jana-gana-mana*. *Vande Mataram* occurs in Bankim Chandra Chatterjee's novel *Ananda Math*, published in 1882. The first political occasion on which it was sung was the 1896 session of the Indian National Congress. The following is the text of its first stanza :

Vande Mataram !
 Sujalam, suphalam, malayaja-shitalam,
 Shasyashyamalam, Mataram !
 Shubhrajyotsna-pulakitayaminim,
 Phullakusumita-drumadala-shobhinim,
 Suhasinim sumadhura-bhasinim,
 Sukhadam, varadam, Mataram !

The following is Sri Aurobindo's translation of the stanza quoted above :

Mother, I bow to thee !
 Rich with thy hurrying streams,
 Bright with thy orchard gleams,
 Cool with thy winds of delight,
 Dark fields waving, Mother of might,
 Mother free.
 Glory of moonlight dreams
 Over thy branches and lordly streams,—
 Clad in thy blossoming trees,
 Mother, giver of ease,
 Laughing low and sweet !
 Mother, I kiss thy feet,
 Speaker sweet and low !
 Mother, to thee I bow !

NATIONAL CALENDAR

In November 1952, a Committee was appointed to examine the different calendars in use in the country and to submit proposals for an accurate and uniform calendar for the whole of India. In its report, submitted in 1955, the Committee recommended the adoption of a National Calendar based on the Saka era with Chaitra as its first month and a normal year of 365 days. The days of this calendar have a permanent correspondence with the days of the Gregorian Calendar, Chaitra 1 falling on March 22 in a common year and March 21 in a leap year. As a result of the decision taken by the Government of India in consultation with the State Governments, the Gregorian Calendar continues to be used as hitherto for official and like purposes, the National Calendar being adopted with effect from March 22, 1957, along with the Gregorian Calendar, for the following official purposes : (i) The Gazette of India, (ii) News broadcasts by All India Radio, (iii) Calendars issued by the Government of India, and (iv) Communications issued by the Government of India and addressed to members of the public.

The State Governments have also been requested to use progressively the National Calendar along with the Gregorian Calendar.

CHAPTER III

GOVERNMENT

The Constitution of India was adopted by the Constituent Assembly on November 26, 1949, and came into force on January 26, 1950.

The preamble to the Constitution embodies the resolve of the people of India to secure for all citizens : "*Justice*, social, economic and political; *Liberty* of thought, expression, belief, faith and worship; *Equality* of status and of opportunity; and to promote among them all *Fraternity* assuring the dignity of the individual and the unity of the Nation."

THE UNION AND ITS TERRITORY

India is a Union of States and its territory comprises the territories of the States of Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Madras, Maharashtra, Orissa, Punjab, Rajasthan, Uttar Pradesh, West Bengal, Jammu and Kashmir and Nagaland, the Union Territories of Delhi, Himachal Pradesh, Manipur, Tripura, the Andaman and Nicobar Islands, the Laccadive, Minicoy and Amindivi Islands, Dadra and Nagar Haveli, Goa, Daman and Diu and Pondicherry, and such other territories as may be acquired.

CITIZENSHIP AND FRANCHISE

The Constitution provides for a single and uniform citizenship for the whole of India. Birth within the territory of the Indian Union, descent from Indian parents, or residence for a period of five years at the commencement of the Constitution entitles one to be a citizen of India. Article 6 provides for displaced migrants from Pakistan to become citizens. Persons of Indian origin residing abroad can also become citizens by registering themselves as such with Indian diplomatic or consular representatives in the countries of their residence.

Article 326 of the Constitution confers the right of vote on every person who is a citizen of India and who is not less than twenty-one years of age on a date to be fixed by the appropriate Legislature and is not otherwise disqualified under the Constitution or any law on the ground of non-residence, unsoundness of mind, crime or corrupt or illegal practice.

FUNDAMENTAL RIGHTS

The Constitution guarantees seven broad categories of fundamental rights which are justiciable. These are : (i) the right to equality including equality before the law, prohibition of discrimination on grounds of religion, race, caste, sex, or place of birth, and equality of opportunity in matters of employment; (ii) the right to freedom of speech and expression, assembly, association or union, movement, residence, acquisition and disposal of property, and the right to practise any profession or occupation subject to the security of the State, friendly relations with foreign countries, public order, decency and morality; (iii) the right against exploitation prohibiting all forms of forced labour, child labour and traffic in human beings; (iv) the right to freedom of conscience and free profession, practice and propagation of religion; (v) the right of minorities to conserve their culture, language and script and to receive education and establish and administer educational institutions of their choice; (vi) the right to property, subject to the right of the State to compulsory acquisition for public purpose after payment of compensation; and (vii) the right to constitutional remedies for the enforcement of fundamental rights.

DIRECTIVE PRINCIPLES OF STATE POLICY

The Directive Principles of State Policy, though not enforceable through courts of law, are regarded as "fundamental in the governance of the country". These lay down that the State shall strive "to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life". These principles further require the State to direct its policy in such a manner as to secure the right of all men and women to an adequate means of livelihood, equal pay for equal work, and, within the limits of its economic capacity and development, to make effective provision for securing the right to work, education and public assistance in the event of unemployment, old age, sickness and disablement or other cases of undeserved want. The State is also required to secure to workers humane conditions of work, a decent standard of life, and full enjoyment of leisure and social and cultural opportunities.

In the economic sphere, the State is to direct its policy in a manner as to secure the distribution of ownership and control of the material resources of the community to subserve the common good and to ensure that the operation of the economic system does not result in the concentration of wealth and means of production to common detriment.

Some of the other important directives relate to prohibition of intoxicating drinks and drugs; provision for free and compulsory education for all children up to the age of fourteen; organisation of village panchayats; separation of judiciary from the executive; promulgation of a uniform civil code for the whole country; protection of national monuments; promotion of educational and economic interests of Scheduled Castes, Scheduled Tribes and other weaker sections; and the promotion of international peace and security, just and honourable relations between nations, respect for international law and treaty obligations, and settlement of international disputes by arbitration.

THE UNION

EXECUTIVE

The Union Executive consists of the President, Vice-President and the Council of Ministers with the Prime Minister at its head.

President

The President is elected by an electoral college consisting of the elected members of both Houses of Parliament and of the Legislative Assemblies of the States in accordance with the system of proportional representation by means of the single transferable vote. The President must be a citizen of India, not less than 35 years of age, and eligible for election as a member of the House of the People. His term of office is five years and he is eligible for re-election. Before entering upon his office the President takes an oath to preserve, protect and defend the Constitution. His removal from office for any violation of the Constitution is to be in accordance with the procedure prescribed in Article 61. In his capacity as the head of the State, the President is empowered to make appointments; summon, prorogue, address, send messages to Parliament and dissolve the House of the People; issue ordinances during recess of Parliament, make recommendations for introducing or moving money bills and give assent to bills; and grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute sentences in certain cases. The executive power of the Union vested in him is exercised by him either directly or through officers of the Government in accordance with the Constitution.

Vice-President

The Vice-President is elected by an electoral college consisting of the members of both Houses of Parliament in accordance with the system of proportional representation by means of the single transferable vote. He must be a citizen of India, not less than 35 years of age, and eligible for election as a member of the Council of States. His term of office is also five years. The Vice-President acts as the ex-officio Chairman of the Council of States and acts as President when the latter is unable to discharge his functions due to illness, absence or any other cause, or till the election of a new President when a vacancy is caused by the death, resignation or removal of the President. While so acting he exercises all the powers and discharges all the functions vested in the President and ceases to perform the functions of the Chairman of the Council of States.

Council of Ministers

There is a Council of Ministers headed by the Prime Minister to aid and advise the President in the exercise of his functions. The Prime Minister is appointed by the President who also appoints the other Ministers on the advice of the Prime Minister. Although the Council holds office during the pleasure of the President, it is collectively responsible to the House of the People. It is the duty of the Prime Minister to communicate to the President all decisions of the Council of Ministers relating to the administration of the affairs of the Union and proposals for legislation and information relating to them and, if the President so requires, submit for the consideration of the Council of Ministers any matter on which a decision has been taken by a Minister but which has not been considered by the Council.

The Council of Ministers, as at present constituted, comprises (i) Ministers who are members of the Cabinet, (ii) Ministers of State who are not members of the Cabinet but hold Cabinet rank, and (iii) Deputy Ministers.

The personnel of the Union Government, as on May 20, 1964,* was as follows :

President : S. Radhakrishnan

Vice-President: Zakir Husain

Members of Cabinet

Portfolios

1. Jawaharlal Nehru	Prime Minister, External Affairs and Atomic Energy
2. Gulzarilal Nanda	Home Affairs
3. T. T. Krishnamachari	Finance
4. Lal Bahadur Shastri	Minister without Portfolio
5. Swaran Singh	Food and Agriculture
6. Asoke Kumar Sen	Law, Posts and Telegraphs
7. Y. B. Chavan	Defence
8. C. Subramaniam	Steel, Mines and Heavy Engineering
9. Humayun Kabir	Petroleum and Chemicals
10. Satya Narayan Sinha	Information and Broadcasting and Parliamentary Affairs
11. H. C. Dasappa	Railways
12. M. C. Chagla	Education
13. D. Sanjivayya	Labour and Employment
14. Mahavir Tyagi	Rehabilitation

Ministers of State

15. Mehr Chand Khanna	Works and Housing
16. Manubhai Shah	International Trade
17. Nityanand Kanungo	Industry
18. Raj Bahadur	Transport
19. S. K. Dey	Community Development & Co-operation
20. Km. Sushila Nayar	Health
21. Jai Sukh Lal Hathi	Home Affairs
22. Smt. Lakshmi N. Menon	External Affairs

*For later information, see Appendices.

23. K. Raghuramaiah	Defence Production
24. O. V. Alagesan	Petroleum and Chemicals
25. Ram Subhag Singh	Food and Agriculture
26. R. M. Hajarnavis	Supply and Technical Development
27. K. L. Rao	Irrigation and Power
28. B. R. Bhagat	Planning and Finance
29. A.M. Thomas	Food and Agriculture

Deputy Ministers

30. Mono Mohan Das	Education
31. Shah Nawaz Khan	Railways
32. S.V. Ramaswamy	Railways
33. Ahmed Mohiuddin	Transport
34. Smt. Tarkeshwari Sinha	Finance
35. P.S. Naskar	Rehabilitation
36. B.S. Murthy	Community Development & Co-operation
37. Smt. Soundaram Ramachandran	Education
38. D.R. Chavan	Defence
39. C.R. Pattabhi Raman	Labour, Employment and Planning
40. Smt. M. Chandrashekhar	Home Affairs
41. Jaganath Rao	Supply
42. Sham Nath	Information and Broadcasting
43. D.S. Raju	Health
44. Dinesh Singh	External Affairs
45. Bibudhendra Misra	Law
46. B. Bhagavati	Posts and Telegraphs
47. Shyam Dhar Misra	Community Development & Cooperation
48. Prakash Chandra Sethi	Steel, Mines and Heavy Engineering
49. R.K. Malviya	Labour and Employment
50. Bhakt Darshan	Education
51. L.N. Mishra	Home Affairs

Parliamentary Secretaries

1. Annasaheb Shinde	Food and Agriculture
2. D. Ering	External Affairs
3. S. C. Jamir	External Affairs
4. S. Ahmed Mehdi	Irrigation and Power
5. Dodda Thimmaiah	Petroleum and Chemicals
6. M. R. Krishna	Education

Official Language

Article 343 of the Constitution provides that the official language of the Union shall be Hindi in the Devanagari script and the form of numerals for official purposes shall be the international form of Indian numerals. English, which was originally to continue as the official language up to January 26, 1965, will, under the Official Languages Act, 1963, continue to be used even after that in addition to Hindi.

Administrative Organisation

In order to regulate the allocation of Government business and its convenient transaction, Rules of Business have been framed under Article 77(3) of the Constitution. The allocation is made by the President on the advice of the Prime Minister by specifying the items of business allotted to each Minister and by assigning a Ministry or a part of a Ministry or more than one Ministry to the charge of a Minister. The Minister is sometimes assisted by a Deputy Minister, who performs such functions as may be assigned to him.

A Secretary to Government is the administrative head of a Ministry and the principal adviser to the Minister. When the volume of work in a Ministry exceeds the manageable charge of a Secretary, one or more wings may be established under a Joint Secretary. A Ministry is divided into Divisions, Branches and Sections functioning under Deputy Secretaries, Under Secretaries and Section Officers respectively.

Organisation and Methods Division

The first phase of the activities of the Organisation and Methods Division, established in March, 1954 for making sustained and concerted efforts for improving administrative efficiency, was directed towards creating consciousness for an ordered improvement in work handled in the Secretariat, by expediting disposal of cases, and keeping track of them to avoid delay. The second phase, which began in 1961 in collaboration with the Special Reorganisation Unit of the Ministry of Finance and the Committee on Plan Projects, aims *inter alia* at securing improvements in procedural competence, techniques of programming, work studies of organisations, matching of workload with staffing, and securing cost reduction in projects.

In view of the increasing importance of work study techniques in simplifying the existing methods of work and assessing staff requirements, so as to secure the maximum utilisation of men and material, the O & M Division periodically conducts instructional courses in work study and also in such specialised techniques as Operations Research. These courses are attended by officers of the lower and middle supervisory levels from the Ministries as well as commercial and industrial State enterprises. A quarterly journal, *Work Improvement*, is issued by the Division.

A Committee of Direction set up under the aegis of the Division is engaged on simplifying, co-ordinating and rationalising the system of reporting by the different sectors of trade and industry to Government authorities.

Public Services

Article 315(1) of the Constitution provides for the establishment of a Union Public Service Commission with a Chairman and Members appointed by the President. The personnel of the Commission, as on May 20, 1964, was as follows :

Chairman : B. N. Jha

Members : A. T. Sen

M. L. Chaturvedi

M. A. Venkataramana Naidu

A. V. Ramaswami

Batuk Singh

N. L. Ahmad

Smt. B. Khongmen

Desraj Mehta

The functions of the Commission as prescribed in Article 320 of the Constitution briefly are : (i) recruitment to all civil services and posts under the Union Government by written examinations, by interview and by promotion, and (ii) advising the Government on all matters relating to methods of recruitment, principles to be followed in making appointments to civil services and posts and making promotions and transfers.

Under Article 311, no member of a civil or an all-India service under the Union or a State can be dismissed or removed by an authority subordinate to that by which he was appointed. Further, before they are dismissed or reduced in rank, the delinquent officers must be given a reasonable opportunity to defend themselves. This privilege is, however, denied (i) to those convicted on a criminal charge; (ii) where the dismissing authority is satisfied that it is not practical to give the offender an opportunity to defend himself; and (iii) where the President or a Governor is satisfied that from the point of view of the security of the State, it is inexpedient to allow an opportunity for defence to the offender.

LEGISLATURE

India is a Sovereign Democratic Republic with a parliamentary form of government based on universal adult franchise. Sovereignty ultimately rests with the people. The executive authority is accountable for all its decisions and actions to the people through their elected representatives in the legislature.

The Legislature of the Union, which is called "Parliament", consists of the President and the two Houses known as the Council of States (*Rajya Sabha*) and the House of the People (*Lok Sabha*).

Council of States

The Council of States consists of not more than 250 members, of whom 12 are nominated by the President and the rest elected. The Council of States is not subject to dissolution, one-third of its members retiring on the expiration of every second year. The elections to the Council are indirect, the allotted quota of the representatives of each State, as provided in the Fourth Schedule to the Constitution, being elected by the elected members of the Legislative Assembly of that State in accordance with the system of proportional representation by means of the single transferable vote. The representatives of the Union Territories are chosen in such manner as Parliament by law prescribes. The nominated members are persons having special knowledge or practical experience in literature, science, art and social service. Members of the Council must be citizens of India and not less than 30 years of age.

House of the People

The House of the People consists of not more than 500 members directly elected from territorial constituencies in the States (the representatives of the State of Jammu and Kashmir being appointed by the President on the recommendation of the Legislature of the State), and not more than 25 members to represent the Union Territories chosen in such manner as Parliament by law provides. The number of seats for each State is so allocated that the ratio between the number and the population of the State is, as far as practicable, the same for all States. Up to 1970 the President can nominate two members to the House of the People to represent the Anglo-Indian community, if in his opinion it is not adequately represented. Unless dissolved sooner, the term of the House is five years from the date of its first meeting.

The total number of members in the Council of States, as constituted at present, is 238, of whom 226 are the elected representatives of the States and the Union Territories and 12 are nominated by the President. The present strength of the House of the People is 510, consisting of 504 members* directly elected from the sixteen States (including six from Jammu and Kashmir appointed by the President on the recommendation of the Legislature of the State) and the six Union Territories of Delhi, Himachal Pradesh, Manipur, Tripura, Goa, Daman and Diu and Pondicherry, and six members nominated by the President to represent Anglo-Indians, the areas specified in Part B of the Sixth Schedule and the Union Territories of the Andaman and Nicobar Islands, and Laccadive, Minicoy and Amin-divi Islands and Dadra and Nagar Haveli.

The table on the next page shows the State-wise allocation of seats in the two Houses and the strength of political parties in the Lok Sabha as on January 31, 1964.

*Pending election for one seat from Nagaland, the sitting member, who is nominated by the President, continues to represent Nagaland, even after its proclamation as the 16th State of India on December 1, 1963.

TABLE 20
ALLOCATION OF SEATS AND STRENGTH OF PARTIES
IN PARLIAMENT

State/Union Territory	No. of Seats in Council of States	House of the People							In-dependents	Total
		No. of Seats	Congress	Praja Socialist	Communist	Socialist	Jan-Sangh	Swa-tantra	Other Parties*	
Andhra Pradesh	18	43	33	—	7(1)	—	—	2	—	43
Assam	7	12	9	2	—	—	—	—	1	12
Bihar	22	53	39(1)**	2	1	1	—	7	3	53
Gujarat	11	22	15(1)	1	—	—	—	5	1	22
Kerala	9	18	6(1)	—	—	—	—	—	3	18
Madhya Pradesh	16	36	24	3	6(2)	1	3	—	3	35†
Madras	18	41	30	—	—(1)	—	—	—	—	40†
Maharashtra	19	44	41	1	—	—	—	—	2	44
Mysore	12	26	25	—	—	—	—	—	—	26
Orissa	10	20	14	1	—	1	—	(4)	1	20
Punjab	11	22	14	—	—	1	3	(3)	4	22
Rajasthan	10	22	14	—	—	—	—	—	—	22
Uttar Pradesh	34	86	61	2	—	2	6	3(1)	3	85†
West Bengal	16	36	22	—	9	—	—	—	3	36
Jammu & Kashmir	4	6	—	—	—	—	—	—	—	6
Nagaland	1	1	—	—	—	—	—	—	—	1
Delhi	3	5	5	—	—	—	—	—	—	5
Himachal Pradesh	2	4	4	—	—	—	—	—	—	4
Manipur	1	2	1(1)	—	—	1	—	—	—	2
Tripura	1	2	—	—	2	—	—	—	—	2
Goa, Daman and Diu	—	2	—	—	—	—	—	—	—	2
Pondicherry	1	1	—	—	—	—	—	—	—	1
TOTAL	226††	504	358(4)	12	29(4)	7	13	20(8)	41	501†

*The column 'Other Parties' includes : Assam : Hill Leaders Conference 1; Bihar : Jharkhand 3; Gujarat : Maha Gujarat Janata Parishad 1; Jammu & Kashmir : National Conference 6; Kerala : Muslim League 2; Revolutionary Socialist Party 1; Madhya Pradesh : Ram Raja Parishad 1; Madras : Dravida Munnetra Kazhagam 8; Mysore : Lok Sevak Sangh 1; Orissa : Gantantra Parishad 4; Punjab : Akali Dal 3; Haryana Lok Samiti 1; Rajasthan : Ram Raja Parishad 1; Uttar Pradesh : Republican Party of India 2; Hindu Mahasabha 1; West Bengal : Revolutionary Socialist Party 1; Lok Sevak Sangh 1; Nagaland : Nominated Pending Elections 1; Goa, Daman and Diu : Maharashtra Gornantak 2.

**Figures in brackets indicate the number of members who have joined the respective parties subsequent to their elections.

†Excludes three vacant seats : one each in Madhya Pradesh, Madras and Uttar Pradesh.

††Exclusive of 12 nominated seats.

The names of the members of the two houses, as on May 20, 1964, are given below :

COUNCIL OF STATES (RAJYA SABHA)

Chairman :

Zakir Husain

Deputy Chairman : Smt. Violet Alva

ANDHRA PRADESH (18)

1. Damodaram Sanjivayya
2. Km. Mary Naidu
3. Yerrapureddi Adinarayana Reddy
4. Yella Reddy
5. Narla Venkateswara Rao
6. Smt. Seeta Yudhvir
7. Makineni Basavapunnaiiah
8. Akbar Ali Khan
9. K. L. Narasimha Rao
10. Kota Punnaiah
11. B. Ramakrishna Rao
12. J. C. Nagi Reddi
13. V. C. Kesava Rao
14. P. K. Kumaran
15. Smt. C. Ammanna Raja
16. N. Narotham Reddy
17. K. V. Raghunatha Reddy
18. Kasu Vengala Reddy

ASSAM (7)

19. Purnananda Chetia
20. A. Thanglura
21. Lila Dhar Barooah
22. Smt. Bedavati Buragohain
23. S. C. Deb
24. Baharul Islam
25. Robindra Nath Kakati

BIHAR (22)

26. A. Mahamad Chaudhry
27. Anand Chand
28. Smt. Jahanara Jaipal Singh
29. R. P. Jain
30. Awadheshwar Prasad Sinha
31. Braja Kishore Prasad Sinha
32. Rama Bahadur Sinha
33. Shishir Kumar
34. Smt. Lakshmi N. Menon
35. Pratul Chandra Mitra
36. Mahesh Saran
37. Shyamnandan Mishra
38. R. P. N. Sinha
39. Rajendra Pratap Sinha
40. L. N. Mishra
41. Mahabir Dass
42. Dharendra Chandra Mallik
43. Mohan Singh Oberoi
44. Jagat Kishore Prasad Narayan Singh
45. Ganga Sharan Sinha
46. Syed Mahmud
47. Bipin Bihary Varma

GUJARAT (11)

48. Maniben V. Patel
49. Khandubhai K. Desai
50. G. H. V. Momin
51. Dahyabhai V. Patel
52. K. S. Chavda

53. Suresh J. Desai
54. Jethalal Harikrishna Joshi
55. Mahipat Mulshankar Mehta
56. Jaisukhlal Lalshanker Hathi
57. Maganbhai Shankarbhai Patel
58. Maneklal Chunilal Shah

KERALA (9)

59. Govindan Nair
60. Kizhedath Damodaran
61. S. M. Sait
62. Joseph Mathen
63. K. Madhava Menon
64. Ebrahim Sulaiman Sait
65. Smt. Devaki Gopidas
66. Palat Kunhi Koya
67. M. N. Govindan Nair

MADHYA PRADESH (16)

68. B. P. Vinayakrao
69. Dayaldas Kurre
70. Khub Chand Baghel
71. Giriraj Kishore
72. P. C. Sethi
73. Niranjan Singh
74. Gurudev Gupta
75. R. K. Malviya
76. A. D. Mani
77. Bhanu Pratap Singh
78. Gopikrishna Vijaiavargiya
79. Vimalkumar Mannalaji Chordia
80. R. S. Khandekar
81. Laxmi Narayan Das
82. Ram Sahai
83. Syed Ahmad

MADRAS (18)

84. A. K. A. Abdul Samad
85. Anandan
86. S. Chandrasekar
87. S. S. Mariswamy
88. G. Rajagopalan
89. S. S. Vassan
90. N. M. Anwar
91. N. Rama Krishna Iyer
92. Smt. G. Parthasarathy
93. T. S. Pattabiraman
94. P. Ramamurti
95. T. Chengalvarayan
96. C. N. Annadurai
97. M. J. Jamal Moideen
98. M. A. Manickavelu Naicker
99. J. Sivashanmugam Pillai
100. K. S. Ramaswamy
101. M. Ruthnasamy

MAHARASHTRA (19)

102. Abidali Jaferbhai
103. Babubhai M. Chinai
104. Udhavrao Sahebrao

105. Sridashiv Krishna
106. M. M. Dharja
107. S. B. Bobade
108. Dajiba Balwantrao Desai
109. Shripad Krishna Limaye
110. Deokinandan Narayan
111. Vithalrao Tukaram Nagpure
112. M. C. Chagla
113. Baba Saheb Savnekar
114. Kodardas Kalidas Shah
115. Bhaurao Krishnarao Gaikwad
116. Bidesh Tukaram Kulkarni
117. Pandharinath Sitaram Patil
118. Dhairyashilrao Yashwantrao Pawar
119. Smt. Tara Ramchandra Sathe
120. Ganpatrao Devji Tapase

MYSORE (12)

121. Muika Govinda Reddy
122. Sheikhan
123. C. M. Poonacha
124. Smt. Annapurna Devi Thimmareddy
125. Smt. Violet Alva
126. M. S. Gurupada Swamy
127. B. C. Nanjundaiya
128. N. Sri Rama Reddy
129. D. P. Karmarkar
130. Patil Puttappa
131. M. Govinda Reddy
132. J. Venkatappa

ORISSA (10)

133. B. K. Mahanti
134. Narayan Patra
135. M. B. R. S. P. Singh Deb
136. Nanda Kishore Das
137. Bairagi Dwibedy
138. Lokanath Misra
139. Bhabhani Charan Pattanayak
140. Manmathnath Misra
141. Sundarmani Patel
142. Smt. Nandini Satpathy

PUNJAB (11)

143. Anup Singh
144. Jagat Narain
145. Smt. M. Kaur
146. Uttam Singh
147. Bansi Lal
148. Neki Ram
149. Raghubir Singh Panj hazari
150. Mohan Singh
151. Abdul Ghani
152. Chaman Lall
153. Surjit Singh Atwal

RAJASTHAN (10)

154. Sadiq Ali
155. D.v. Singh
156. Shanti Lal
157. Kumbha Ram
158. Vacant
159. Smt. Sharda Bhargava
160. Abdul Shakoor
161. P. N. Kathju
162. Sawai Man Singh
163. Ramesh Chandra

UTTAR PRADESH (34)

164. Dattopant Thengari
165. Faridul Haq Ansari
166. Mahabir Prasad (of Allahabad)
167. Bashir Husain Zaidi
168. Umashankar Dikshit
169. A. C. Gilbert
170. Ram Singh
171. Tarkeshwar Pande
172. Smt. Sarla Devi
173. Mahabir Prasad (of Agra)
174. Sham Sundar Narain Tankha
175. Arjun Arora
176. Bhagwat Narayan Bhargava
177. Jogesh Chandra Chatterji
178. Ramgopal Gupta
179. Nafisul Hasan
180. Piere Lal Kureel
181. Mukut Behari Lal
182. G. S. Pathak
183. Jogendra Singh
184. M. R. Shervani
185. Hira Vallabha Tripathi
186. Smt. Anis Kidwai
187. Lila Dhar Asthana
188. Chandra Shekhar
189. Dharam Prakash
190. Mohammad Ibrahim
191. Sitaram Jaipuria
192. Gaure Murahari
193. Smt. Shyam Kumari Khan
194. C. D. Pande
195. P. N. Sapru
196. M. M. S. Siddhu
197. Atal Behari Vajpayee

WEST BENGAL (16)

198. Dharam Chand Sarawgi
199. D. L. Sen Gupta
200. Smt. Phulrenu Guha
201. Bhupesh Gupta
202. Muhammad Ishque
203. Rajpat Singh Doogar
204. Sudhir Ghosh
205. Nikunja Behari Maiti
206. Biren Roy
207. Mriganka Mohan Sur
208. Nausher Ali
209. Surendra Mohan Ghose
210. Niren Ghosh
211. Nihar Ranjan Ray
212. Ramprasanna Ray
213. R. K. Bhuwalka

JAMMU AND KASHMIR (4)

214. O. P. Mehta
215. Gulam Mohammed
216. Krishan Dutt
217. Ali Mohamad Tariq

NAGALAND (1)

218. Vacant

DELHI (3)

219. I. K. Gujral
220. Kumari Shanta Vasisht
221. Santokh Singh

HIMACHAL PRADESH (2)

222. Chiranji Lal
223. Shiva Nand Ramaul

MANIPUR (1)

224. L. Lalit Madhob Sharma

TRIPURA (1)

225. Tarit Mohan Dasgupta

PONDICHERRY (1)

226. P. Abraham

NOMINATED BY PRESIDENT

227. Jairamdas Daulatram
228. B. M. Prasad
229. G. Ramachandran
230. Smt. Shakuntala Paranjyee
231. Tara Shankar Banerjee
232. Vacant
233. M. Sanyanarayana
234. A. R. Wadia
235. R. R. Diwakar
236. Gopal Singh
237. Tara Chand
238. B. V. (Mama) Waverkar

HOUSE OF THE PEOPLE (LOK SABHA)

Speaker : Hukam Singh

Deputy Speaker : S. V. Krishnamoorthy Rao

S. No.	Constituency	Name of Member	Party*
(1)	(2)	(3)	(4)
ANDHRA PRADESH (43)			
1	Adilabad	G. Narayan Reddy	Con.
2	Adoni	Pendekanti Venkatasubbaiah	Con.
3	Amalapuram (R)	Bayya Suryanarayana Murthy	Con.
4	Anakapalli	Missula Suryanarayanamurty	Con.
5	Anantapur	Osman Ali Khan	Con.
6	Cheepurupalli	R. V. Gopalkrishna Rangarao	Con.
7	Chittoor	N. G. Ranga	SWA
8	Cuddapah	Yeddula Eswara Reddy	CPI
9	Eluru	Smt. V. Vimala Devi	CPI
10	Gadwal	J. Rameshwar Rao	Con.
11	Gudivada	Maganti Ankineedu	Con.
12	Guntur	Kotha Raghuramaiah	Con.
13	Hindupur	K. V. Ramakrishna Reddy	Con.
14	Hyderabad	Gopal S. Melkote	Con.
15	Kakinada	M. Thirumala Rao	Con.
16	Karimnagar	J. Ramapathi Rao	Con.
17	Kavali	B. Gopala Reddi	Con.
18	Khammam	Smt. T. Lakshmikantamma	Con.
19	Kurnool	Smt. Yashoda Reddy	Con.
20	Mahbubabad	Etikala Madhusudan Rao	Con.
21	Mahbubnagar (R)	J. B. Muthyal Rao	Con.
22	Markapur	Gujjula Yallamanda Reddy	CPI
23	Masulipatnam	Mandala Venkataswamy	Ind.†
24	Medak	P. Hanmanth Rao	Con.
25	Miryalguda (R)	Laxmi Das	CPI
26	Nalgonda	Ravi Narayan Reddy	CPI
27	Narasapur	Datla Balarama Raju	Con.
28	Narasipatnam (R)	Matcharasa Matcharaju	Con.
29	Nellore (R)	B. Anjanappa	Con.
30	Nizamabad	H. C. Heda	Con.
31	Ongole	Madala Narayana Swamy	CPI

*Party affiliations are as at the time of elections. Subsequent changes are noted in footnotes. The abbreviations used are : Indian National Congress (Con); Praja Socialist Party (PSP); Communist Party of India (CPI); Bharatiya Jan Sangh (JS); Socialist Party (SP); Swatantra Party (SWA); Akhil Bharat Hindu Mahasabha (HM); Akhil Bharatiya Ram Rajya Parishad (RRP); Republican Party of India (RPI); Jharkhand Party (JP); Indian Union Muslim League (ML); Dravida Munnetra Kazhagam (DMK); All India Forward Bloc (FB); Independent (Ind); Revolutionary Socialist Party (RSP); Maha Gujarat Janta Parishad (MGJP); Hill Leaders' Conference (HLC); Lok Sevak Sangh (LSS); Gantantra Parishad (G.P.); Akali Dal (AD); Haryana Lok Samiti (HLS); National Conference (NC); and Maharashtratravadi Gomantak (MG).

†Since joined the CPI.

(1)	(2)	(3)	(4)
32	Parvathipuram (R)	Biddika Satyanarayana	Con.
33	Peddapalli (R)	M. R. Krishna	Con.
34	Rajahmundry	Datla Satyanarayana Raju	Con.
35	Rajampet	C. L. Narasimha Reddy	SWA
36	Secunderabad	Ahmed Mohiuddin	Con.
37	Srikakulam	B. Rajagopala Rao	Con.
38	Tenali	Kolla Venkaiah	CPI
39	Tirupati (R)	C. Dass	Con.
40	Vicarabad	Smt. Sangam Laxmi Bai	Con.
41	Vijayawada	K. L. Rao	Con.
42	Visakhapatnam	Vijaya Anand	Con.
43	Warangal	Bakar Ali Mirza	Con.
ASSAM (12)			
44	Autonomous Districts (R)	G. Gilbert Swell	HLC
45	Barpeta	Smt. Renuka Devi Barkataki	Con.
46	Cachar	Smt. Jyotsna Chanda	Con.
47	Darrang	Bijoy Chandra Bhagavati	Con.
48	Dhubri	Ghyasuddin Ahmad	Con.
49	Dibrugarh	Jogendra Nath Hazarika	Con.
50	Gauhati	Hem Barua	PSP
51	Goalpara (R)	Dharanidhar Basumatari	Con.
52	Jorhat	Rajendra Nath Baruah	PSP
53	Karimganj (R)	Nihar Ranjan Laskar	Con.
54	Nowgong	Liladhar Kotoki	Con.
55	Sibsagar	Prafulla Chandra Borooah	Con.
BIHAR (53)			
56	Aurangabad	Smt. Lalita Rajya Laxmi	SWA
57	Bagaha	Kamal Nath Tiwari	Con.
58	Banka	Smt. Shakuntala Devi	Con.
59	Barh	Smt. Tarkeshwari Sinha	Con.
60	Begusarai	Mathura Prasad Mishra	Con.
61	Bettiah (R)	Bhola Raut	Con.
62	Bhagalpur	Bhagwat Jha Azad	Con.
63	Bikramganj	Ram Subhag Singh	Con.
64	Buxar	Anant Prasad Sharma	Con.
65	Chapra	Ram Shekhar Prasad Singh	Con.
66	Chatra	Smt. Vijaya Raju	SWA
67	Darbhanga (R)	Shree Narain Das	Con.
68	Dhanbad	P. R. Chakraverti	Con.
69	Dumka (R)	Satya Charan Besra	Con.
70	Gaya	Brajeshwar Prasad	Con.
71	Giridih	Bateshwar Singh	SWA
72	Godda	Prabhudayal Himatsingka	Con.
73	Gopalganj	Dwarka Nath Tiwari	Con.
74	Hajipur	Rajeshwar Patel	Con.
75	Hazaribagh	Basant Narain Singh	SWA
76	Jahanabad	Smt. Satyabhama Devi	Con.
77	Jainagar	Yamuna Prasad Mandal	Con.
78	Jamui (R)	Nayantra Das	Con.
79	Jamshedpur	Udai Kar Misra	CPI
80	Katihar	Priya Gupta	PSP
81	Kesaria	Bhishma Prasad Yadava	Con.
82	Khagaria	Jialal Mandal	Con.
83	Kishanganj	Mohammed Tahir	Con.
84	Lohardaga (R)	David Mumzai	SWA*
85	Madhubani	Yogendra Jha	PSP
86	Maharajganj	Krishna Kant Singh	Con.
87	Mahua (R)	Chandramani Lal Chaudhary	Con.
88	Monghyr	Banarsi Prasad Sinha	Con.
89	Motihari	Bibhuti Mishra	Con.
90	Muzaffarpur	Digvijay Narain Singh	Con.
91	Nalanda	Sidheshwar Prasad	Con.

*Since joined the Congress Party.

(1)	(2)	(3)	(4)
92	Nawada (R)	Ram Dhani Das	Con.
93	Palamau	Smt. Shashank Manjari	SWA
94	Patna	Smt. Ramdulari Devi	Con.
95	Pupri	Sashi Ranjan Prasad Sah	Con.
96	Purnea	Phani Gopal Sen	Con.
97	Rajmahal (R)	Iswar Marandi	JP
98	Ranchi East	Prashanta Kumar Ghosh	SWA
99	Ranchi West (R)	Jaipal Singh	JP
100	Rosera (R)	Rameshwar Sahu	Con.
101	Saharsa	Bhupendra Narayan Mandal	SP
102	Samastipur	Satya Narayan Sinha	Con.
103	Sasaram (R)	Jagjivan Ram	Con.
104	Shahabad	Baliram Bhagat	Con.
105	Singbhum (R)	Hari Charan Soy	JP
106	Sitamarhi	Nagendra Prasad Yadav	Con.
107	Siwan	Mohd. Yusuf	Con.
108	Sonbarsa (R)	Tulmohan Ram	Con.

GUJARAT (22)

109	Ahmedabad	Indulal Kanaiyalal Jainik	MGJP
110	Amreli	Smt. Jayaben Vajubhai Shah	Con.
111	Anand	Narendrasinh R. Mahida	SWA
112	Banaskantha	Smt. Zoharaben A. Chavda	Con.
113	Baroda	Fatesinhrao Pratapsinhrao Gaekwad	Con.
114	Bhavnagar	Jashvant Mehta	PSP
115	Broach	Chhotubhai Makanbhai Patel	Con.
116	Bulsar (R)	Nanubhai N. Patel	Con.
117	Dohad (R)	Parshottamdas Haribhai Bheel*	SWA
118	Jamnagar	Manubhai M. Shah	Con.
119	Junagadh	Chitaranjan Rugnath Raja	Con.
120	Kaira	Pravinsinh N. Solanki	SWA
121	Kutch	Himatsinghji	SWA
122	Mandvi (R)	Chhaganbhai M. Kedaria	Con.
123	Mehsana	Mansingh Prithviraj Patel	Con.
124	Panchmahals	Dahyabhai Jivanji Naik	Con.
125	Patan	Purushotamdas R. Patel	Con.
126	Rajkot	M. R. Masani	SWA
127	Sabarkantha	Gulzarilal Nanda	Con.
128	Sabarmati (R)	Muldas Bhudardas Vaishya	Con.
129	Surat	Morarji R. Desai	Con.
130	Surendranagar	Ghanshyamlal Oza	Con.

KERALA (18)

131	Ambalapuzha	P. K. Vasudevan Nair	CPI
132	Badagara	A. V. Raghavan	Ind.†
133	Chirayinkil	M. K. Kumaran	CPI
134	Ernakulam	A. M. Thomas	Con.
135	Kasergod	A. K. Gopalan	CPI
136	Kottayam	Mathew Maniyangadan	Con.
137	Kozhikode	C. H. Mohamed Koya	ML
138	Manjeri	Muhammad Ismail	ML
139	Mavelikkara (R)	R. Achuthan	Con.
140	Muvattupuzha	Cherian J. Kappen	Con.
141	Mukundapuram	P. Govinda Menon	Con.
142	Palghat (R)	P. V. Kunhan	CPI
143	Ponnani	E. Imbichibava	CPI
144	Quilon	N. Sreekantan Nair	RSP
145	Tellicherry	S. K. Pottakkatt	Ind.*
146	Thiruvalla	Ravindra Varma	Con.
147	Trichur	K. K. Warior	CPI
148	Trivandrum	P. S. Nataraja Pillai	Ind.**

*For results of by-elections, see Appendices.

†Since joined the CPI.

**Since joined the Congress Party.

(1)	(2)	(3)	(4)
MADHYA PRADESH (36)			
149	Balaghat	Bholaram Paradhi	PSP
150	Baloda Bazar (R)	Smt. Minimata A. Guru	Con.
151	Bastar (R)	Lakshmu Bhawani	Ind.
152	Bhind (R)	Suriya Prashad	Con.
153	Bhopal	Smt. Maimoona Sultan	Con.
154	Bilaspur	Chandrabhan Singh	Con.
155	Chhindwara	B. L. Chandak	Con.
156	Damoh (R)	Smt. Sahodra Bai Rai	Con.
157	Dewas (R)	Hukam Chand Kachwai	JS
158	Durg	Mohanlal Bakliwal	Con.
159	Guna	Ramsahai Shivprasad Pandey	Con.
160	Gwalior	Smt. Vijaya Raje Scindia	Con.
161	Hoshangabad	H. V. Kamath	PSP
162	Indore	Homi F. Daji	Ind.*
163	Jabalpur	Govind Das	Con.
164	Janjgir	Amar Singh Saigal	Con.
165	Jhabua (R)	Smt. Jamuna Devi	Con.
166	Khajuraho	Ram Sahai Tiwari	Con.
167	Khandwa	Mahesh Datt Misra	Con.
168	Khargone	Ramchandra Viithal Bado	JS
169	Mahasamund	Vidya Charan Shukla	Con.
170	Mandla (R)	M. G. Uikey	Con.
171	Mandsaur	U. M. Trivedi	JS
172	Raigarh	Vijaya Bhushan Singh Deo	RRP
173	Raipur (R)	Smt. Shyamkumari Devi	Con.
174	Rajgarh	Bhanu Prakash Singh	Ind.
175	Rajnandgaon	Birendra Bahadur Singh	Con.
176	Rewa	Shiva Datt Upadhyaya	Con.
177	Sagar	Jwala Prasad Jyotishi	Con.
178	Seoni (R)	N. M. Wadiwa	Con.
179	Shahdol (R)	Buddhu Singh Utiya	SP
180	Shivpuri	Vedehi Charan Parashar	Con.
181	Sidhi	Anand Chandra Joshi	Con.
182	Surguja (R)	Babunath Singh	Con.
183	Tikamgarh (R)	Kure Mate	PSP
184	Ujjain	Radhelal Vyas	Con.
MADRAS (41)			
185	Aruppukkottai	Kasinatha Durai	Con.
186	Chidambaram	R. Kanakasabai	Con.
187	Chingleput	O. V. Alagesan	Con.
188	Coimbatore	P. R. Ramakrishnan	Con.
189	Cuddalore	T. D. Ramabadrar	DMK
190	Dindigul	Smt. S. T. Soundaram Ramachandran	Con.
191	Erode	S. K. Paramasivan	Con.
192	Gobichettipalayam	P. G. Karuthiruman	Con.
193	Karur	R. Ramanathan Chettiar	Con.
194	Koilkatti (R)	S. C. Balakrishnan	Con.
195	Krishnagiri	K. Rajaram	DMK
196	Kumbakonam	C. R. Pattabhi Raman	Con.
197	Madras North	P. Srinivasan	Con.
198	Madras South	K. Manoharan	DMK
199	Madurai	N. M. R. Subbaraman	Con.
200	Mayuram (R)	Smt. M. Chandrasekhar	Con.
201	Melur (R)	P. Maruthiah	Con.
202	Nagapattinam	Gopalasamy Thengondar	Con.
203	Nagercoil	A. Nesamony	Con.
204	Mamakkal (R)	V. K. Ramaswamy	Con.
205	Nilgiris	Smt. Akkamma Devi	Con.
206	Perambalur	Era Sezhiyan	DMK
207	Pertiyakulam	M. Malaichami	Con.
208	Pollachi	C. Subramaniam	Con.
209	Pudukkottai	R. Umamah	CPI

*Since joined the CPI.

(1)	(2)	(3)	(4)
210	Ramanathapuram	N. Arunachalam	Con.
211	Salem	S. V. Ramaswamy	Con.
212	Sriperumbudur (R)	P. Sivasankaran	DMK
213	Tenkasi	M. P. Swamy	Con.
214	Thanjavur	V. Vairava Thevar	Con.
215	Tindivanam	R. Venkatasubba Reddiar	Con.
216	Tiruchendur	T. T. Krishnamachari	Con.
217	Tiruchengode	S. Kandappan	DMK
218	Tiruchirapalli	Ananda Nambiar	CPI
219	Tirukoilur (R)	L. Elayaperumal	Con.
220	Tirunelveli	P. Muthiah	Con.
221	Tirupattur	R. Muthu Gounder	DMK
222	Tiruvallur	V. Govindasamy Naidu	Con.
223	Tiruvannamalai	R. Dharmalingam	DMK
224	Vellore	T. Abdul Wahid	Con.
225	Wandiwash (R)	A. Jayaraman	Con.
MAHARASHTRA (44)			
226	Ahmednagar	Motilal K. Firodia	Con.
227	Akola	Mohammad Mohibbul Haq	Con.
228	Amravati	Panjabrao S. Deshmukh	Con.
229	Aurangabad	Bhaurao D. Deshmukh	Con.
230	Baramati	Gulabrao Keshavrao Jedhe	Con.
231	Bhandara	R. M. Hajarnavis	Con.
232	Bhir	Dwarkadas Mantri	Con.
233	Bhiwandi (R)	Yashwantrao Martandrao Mukane	Con.
234	Bombay City Central North (R)	N. S. Kajrolkar	Con.
235	Bombay City—Central South	V. B. Gandhi	Con.
236	Bombay City North	V. K. Krishna Menon	Con.
237	Bombay City South	S. K. Patil	Con.
238	Buldana	S. R. Rane	Con.
239	Chanda	Shyamshah Lal	Ind.
240	Dhulia	C. A. Rawandale	Con.
241	Gondia (R)	Balakrishna R. Wasnik	Con.
242	Hatkanangle (R)	Krishnaji Laxman More	Con.
243	Jalgaon	J. S. Patil	Con.
244	Jalna	R. N. Yadav Lonikar	Con.
245	Karad	Dajisaheb Ramrao Chavan	Con.
246	Khamgaon (R)	Laxmanrao Shrawanji Bha'kar	Con.
247	Khed	Raghunath K. Khadilkar	Con.
248	Kolaba	Bhaskar Narayan Dighe	Con.
249	Kolhapur	V. T. Patil	Con.
250	Kopergaon	Annasaheb Shinde	Con.
251	Latur (R)	Tulsiram Dashrath Kamble	Con.
252	Malegaon	Madhavrao Laxmanrao Jadhav	Con.
253	Miraj	Vijayasinhrao Ramrao Dafle	Con.
254	Nagpur	M. S. Aney	Ind.
255	Nanded	Tulshidas Subanrao Jadhav	Con.
256	Nandurbar (R)	Laxman Vedu Valvi	Con.
257	Nasik	Y. B. Chavan	Con.
258	Osmanabad	T. A. Patil	Con.
259	Pandharpur (R)	T. H. Sonavane	Con.
260	Parbhani	Shivajirao S. Deshmukh	Con.
261	Poona	Shankarrao Shantaram More	Con.
262	Rajapur	Nath Pai	PSP
263	Ramtek	Madhaorao Bhagwantrao Patil	Con.
264	Ratnagiri	Smt. Sharda Mukherjee	Con.
265	Satara	Kisan Veer	Con.
266	Sholapur	Madeppa Bandappa Kadadi	Con.
267	Thana	Sonubhau Dagadu Baswant	Con.
268	Wardha	Kamalnayan Bajaj	Con.
269	Yeotmal	Deorao Shioram Patil	Con.

(1)	(2)	(3)	(4)
		MYSORE (26)	
270	Bangalore	H. C. Dasappa	Con.
271	Bangalore City	K. Hanumanthaiah	Con.
272	Belgaum	H. V. Koujalgi	Con.
273	Bellary	Tekur Subramanyam	Con.
274	Bidar (R)	Ramchander Veerappa	Con.
275	Bijapur North	R. G. Dube	Con.
276	Bijapur South	S. B. Patil	Con.
277	Chamarajanagar (R)	S. M. Siddiah	Con.
278	Chikballapur	K. C. Reddy	Con.
279	Chikodi	Vasantrao Lakhagounda Patil	Con.
280	Chitradurga	S. Veerabasappa	Con.
281	Dharwar North	Smt. Sarojini B. Mahishi	Con.
282	Dharwar South	F. H. Mohsin	Con.
283	Gulbarga	Mahadevappa Rampure	Con.
284	Hassan	H. Siddananjappa	Con.
285	Kanara	Jaochim Alva	Con.
286	Kolar (R)	Dodda Thimmaiah	Con.
287	Koppal	Sivamurthy Swamy	LSS
288	Mandya	M. K. Shivananjappa	Con.
289	Mangalore	A. Shankar Alva	Con.
290	Mysore	M. Shankaraiya	Con.
291	Raichur	Jagannath Rao Chandriki	Con.
292	Shimoga	S. V. Krishnamoorthy Rao	Con.
293	Tiptur	C. R. Basappa	Con.
294	Tumkur	Ajit Prasad Jain	Con.
295	Udipi	U. Srinivasa Malliah	Con.
		ORISSA (20)	
296	Angul	Harekrushna Mahtab	Con.
297	Balasore	Gokulnanda Mohanty	Con.
298	Bhadrak (R)	Kanhu Charan Jena	Con.
299	Bhanjanagar	Mohan Nayak	Con.
300	Bhubaneswar	Purna Chandra Deo Bhanj	Con.
301	Bolangir (R)	Hrusikesh Mahananda	GP*
302	Chatrapur	A. T. Sarma	Con.
303	Cuttack	Nityanand Kanungo	Con.
304	Dhenkanal	Baishnab Charan Patnaik	Con.
305	Jajpur (R)	Rama Chandra Mallick	Con.
306	Kalahandi	Pratap Keshari Deo	GP*
307	Kendrapara	Surendranath Dwivedy	PSP
308	Keonjhar	Laxmi Narayan Bhanj Deo	Con.
309	Koraput (R)	Ramachandra Ulaka	Con.
310	Mayurbhanj (R)	Maheswar Naik	Con.
311	Nowrangpur	Jaganath Rao	Con.
312	Phulbani (R)	Rajendra Kohar	GP*
313	Puri	Bibhudendra Misra	Con.
314	Sambalpur	Kishen Pattnayak	SP
315	Sundergarh (R)	Yagya Narayan Singh	GP*
		PUNJAB (22)	
316	Ambala (R)	Chuni Lal	Con.
317	Amritsar	Gurmukh Singh Musafir	Con.
318	Bhatinda (R)	Dhanna Singh Gulshan	AD*
319	Ferozepore	Iqbal Singh	Con.
320	Gurdaspur	Diwan Chand Sharma	Con.
321	Gurgaon	Gajraj Singh Rao	Con.
322	Hissar	Mani Ram Bagri	SP
323	Hoshiarpur	Amar Nath Vidyalkar	Con.
324	Jhajjar	Jagdev Singh Siddhanti	HLS
325	Jullundur	Swaran Singh	Con.
326	Kaithal	Dev Dutta Puri	Con.
327	Kangra	Hem Raj	Con.
328	Karnal	Rameshwaranand	JS
329	Ludhiana	Kapur Singh	AD*

*Since joined the Swatantra Party.

(1)	(2)	(3)	(4)
330	Mahendragarh	Yudhvir Singh Chaudhary	JS
331	Moga (R)	Buta Singh	AD*
332	Patiala	Hukum Singh	Con.
333	Phillaur (R)	Sadhu Ram	Con.†
334	Rohtak	Lahri Singh	JS
335	Sangrur	Ranjit Singh	Con.
336	Taran Taran	Surjit Singh Majithia	Con.
337	Una (R)	Daljit Singh	
RAJASTHAN (22)			
338	Ajmer	M. B. L. Bhargava	Con.
339	Alwar	Kashi Ram Gupta	Ind.
340	Banswara (R)	Ratan Lal	Con.
341	Barmar	Tan Singh	RRP
342	Bharatpur	Raj Bahadur	Con.
343	Bhilwara	Vacant	—
344	Bikaner	Karni Singhji	Ind.
345	Chittorgarh	Manikya Lal Varma	Con.
346	Dausa	Prithvi Raj	SWA
347	Ganganagar (R)	Panna Lal Barupal	Con.
348	Hindaun	Tika Ram Paliwal	Con.
349	Jaipur	Smt. Gayatri Devi	SWA
350	Jalore	Harish Chandra Mathur	Con.
351	Jhalawar	Brij Raj Singh	Con.
352	Jhunjhuru	Radheshyam R. Morark	Con.
353	Jodhpur	Laxmi Mal Singhvi	Ind.
354	Kotah (R)	Onkar Lal Berwa	JS
355	Nagour	Surendra Kumar Dey	Con.
356	Pali	Jaswantraj Mehta	Con.
357	Sawai Madhopur (R)	Kesar Lal	SWA
358	Sikar	Rameshwar Tantia	Con.
359	Udaipur (R)	Dhuleshwar Meena	Con.
UTTAR PRADESH (86)			
360	Agra	Achal Singh	Con.
361	Akbarpur (R)	Panna Lal	Con.
362	Aligarh	B. P. Maurya	RPI
363	Allahabad	Lal Bahadur Shastri	Con.
364	Almora	Jang Bahadur Singh Bist	Con.
365	Amroha	J. B. Kripalani	Ind.
366	Azamgarh	Ram Harakh Yadav	Con.
367	Bahraich	Ram Singh	SWA
368	Balarampur	Smt. Subhadra Joshi	Con.
369	Ballia	Murli Manohar	Con.
370	Banda	Smt. Savitri Nigam	Con.
371	Bansgaon (R)	Mahadeo Prasad	Con.
372	Bansi (R)	Sheo Narain	Con.
373	Bara Banki	Ram Sewak Yadav	SP
374	Bareilly	Brij Raj Singh	JS
375	Basti	Keshava Deva Malaviya	Con.
376	Bijnor	Prakash Vir Shastri	Ind.
377	Bilhaur	Bras Behari Mehrotra	Con.
378	Bisauli	Ansar Harvani	Con.
379	Budaun	Onkar Singh	JS
380	Bulandhahr	Surendra Pal Singh	Con.
381	Chail (R)	Masuriya Din	Con.
382	Chandauli	Balkrishna Singh	Con.
383	Dehra Dun	Mahavir Tyagi	Con.
384	Deoria	Bishwanath Roy	Con.
385	Domariaganj	Kripa Shankar	Con.
386	Etah	Bishan Chandar Seth	HM
387	Etawah	Gopi Nath Dixit	Con.
388	Faizabad	Brij Basi Lal	Con.
389	Farrukhabad	Ram Manohar Lohia	SP

*Since joined the Swatantra Party.

†Hukum Singh was returned on the Congress ticket, but ceased to have any party affiliation after his election as Speaker of the Lok Sabha.

(1)	(2)	(3)	(4)
390	Fatehpur	Gauri Shankar Kakkar	Ind.
391	Firozabad	Shambu Nath Chaturvedi	Con.
392	Garhwal	Bhakt Darshan	Con.
393	Ghatampur(R)	Tula Ram	Con.
394	Ghazipur	Vishwanath Singh Gahmari	Con.
395	Ghosi	Jai Bahadur Singh	CPI
396	Gonda	Ram Ratan Gupta	Con.
397	Gorakhpur	Sinhasan Singh	Con.
398	Hamirpur	Mannoo Lal Dwivedi	Con.
399	Hapur	Smt. Kamala Chaudhri	Con.
400	Hardoi (R)	Kindar Lal	Con.
401	Hata	Kashi Nath Pandey	Con.
402	Hathras (R)	Vacant	—
403	Jalaun (R)	Ram Sewak	Con.
404	Jalesar	Krishnapal Singh	SWA
405	Jaunpur	Rajdeo Singh	Con.
406	Jhansi	Km. Sushila Nayar	Con.
407	Karimganj	P. K. Khanna	Con.
408	Kairana	Yash Pal Singh	Ind.*
409	Kaisarganj	Smt. Basant Kunwar Ba	SWA
410	Kanpur	S. M. Banerjee	Ind.
411	Kheri	Balgovind Verma	Con.
412	Khurja (R)	Kanhaiya Lal Balmiki	Con.
413	Lalganj (R)	Visram Prasad	PSP
414	Lucknow	B. K. Dhaon	Con.
415	Machhlisahar (R)	Ganapati Ram	Con.
416	Maharajganj	Mahadeva Prasad	Con.
417	Mainpuri	Badshah Gupta	Con.
418	Mathura	Digambar Singh	Con.
419	Meerut	Shah Nawaz Khan	Con.
420	Mirzapur	Shyam Dhar Misra	Con.
421	Misrikh (R)	Gokaran Prasad	JS
422	Mohanlalganj (R)	Smt. Ganga Devi	Con.
423	Moradabad	Muzaffar Hussain	RPI
424	Musafirkhana	Rananjaya Singh	Con.
425	Muzaffarnagar	Sumat Prasad	Con.
426	Nainital	Krishna Chandra Pant	Con.
427	Phulpur	Jawaharlal Nehru	Con.
428	Pilibhit	Mohan Swarup	PSP
429	Pratapgarh	Ajit Pratap Singh	JS
430	Rae Bareli (R)	Baij Nath Kureel	Con.
431	Rampur	S. Ahmed Mehdi	Con.
432	Ramsanehighat (R)	Ramanand Shastri	Con.
433	Rasra	Sarjoo Pandey	CPI
434	Robertsganj (R)	Ram Swarup	Con.
435	Saharanpur (R)	Sunder Lal	Con.
436	Salempur	Vishwanath Pandey	Con.
437	Salon	Dinesh Singh	Con.
438	Sardhana	Krishan Chandra Sharma	Con.
439	Shahabad	Yuveraj Dutta Singh	JS
440	Shahjahanpur (R)	Lakhan Dass	Ind.
441	Sitapur	Suraj Lal Verma	JS
442	Sultanpur	Kunwar Krishna Verma	Con.
443	Tehri-Garhwal	Manabendra Shah	Con.
444	Unnao	Krishna Deo Tripathi	Con.
445	Varanasi	Raghunath Singh	Con.
WEST BENGAL (36)			
446	Asansol	Atulya Ghosh	Con.
447	Ausgram (R)	Mono Mohan Das	Con.
448	Balurghat (R)	Sarkar Murmu	CPI
449	Bankura	Ramgoti Benerji	Con.
450	Barasat	Arun Chandra Guha	Con.
451	Barrackpore	Smt. Renu Chakravarty	CPI

*Since joined the Swatantra Party.

(1)	(2)	(3)	(4)
452	Basirhat	Humayun Kabir	Con.
453	Berhampur	Tridib Kumar Chaudhuri	RSP
454	Birbhum (R)	Sisir Kumar Saha	Con.
455	Burdwan	N. C. Chatterjee	Ind.
456	Calcutta Central	Harendra Nath Mukerjee	CPI
457	Calcutta East	Ranen Sen	CPI
458	Calcutta North-West	Asoke Kumar Sen	Con.
459	Calcutta South-West	Indrajit Gupta	CPI
460	Contai	Basanta Kumar Das	Con.
461	Cooch-Behar (R)	P. C. Barman	Con.
462	Darjeeling	T. Manan	Con.
463	Diamond Harbour	Sudhansu Bhusan Das	Con.
464	Ghatal	Sachindra Choudhuri	Con.
465	Hooghly	Prabhat Kar	CPI
466	Howrah	Mohammad Elias	CPI
467	Jalpaiguri	Nalini Ranjan Ghosh	Con.
468	Jhargram (R)	Subodh Hansda	Con.
469	Joynagar (R)	Pareesh Nath Kayal	Con.
470	Katwa	Saradish Roy	CPI
471	Malda	Smt. Renuka Ray	Con.
472	Mathurapur (R)	Purnendu Sekhar Naskar	Con.
473	Midnapur	Gobinda Kumar Singha	Con.
474	Murshidabad	Syed Badrudduja	Ind.
475	Nabadwip	H. P. Chatterjee	Ind.
476	Purulia	Bhajahari Mahato	Ind.
477	Raiganj	Chapalakanta Bhattacharya	Con.
478	Serampore	Dinen Bhattacharya	CPI
479	Tamluk	Satish Chandra Samanta	Con.
480	Uluberia	Purnendu Narayan Khan	Con.
481	Vishnupur (R)	Pashupati Mandal	Con.
JAMMU AND KASHMIR (6)*			
482	—	Sham Lal Saraf	NC
483	—	Bakshi Abdur Rashid	NC
484	—	Abdul Ghani Goni	NC
485	—	Gopal Dutt Mengi	NC
486	—	Inder Malhotra	NC
487	—	Nazir Hussain Samnani	NC
NAGALAND (1)*			
488	—	S. C. Jamir	—†
DELHI (5)			
489	Chandni Chowk	Sham Nath	Con.
490	Delhi Sadar	Shiv Charan Gupta	Con.
491	Karol Bagh (R)	Naval Prabhakar	Con.
492	New Delhi	Mehr Chand Khanna	Con.
493	Outer Delhi	Brahm Perkash	Con.
HIMACHAL PRADESH (4)			
494	Chamba	Chattar Singh	Con.
495	Mahasu	Virbhadra Singh	Con.
496	Mandi	Lalit Sen	Con.
497	Sirmur (R)	Pratap Singh	Con.†
MANIPUR (2)			
498	Inner Manipur	S. T. Singh	Con.
499	Outer Manipur (R)	R. Keishing	SP†

*Nominated by the President.

†Since joined the Congress Party.

(1)	(2)	(3)	(4)
TRIPURA (2)			
500	Tripura East (R)	Dasaratha Deb	CPI
501	Tripura West	Biren Dutta	CPI
ANDAMAN AND NICOBAR ISLANDS (1)*			
502	—	Niranjan Lal	—†
LACCADIVE, MINICOY AND AMINDIVI ISLANDS (1)*			
503	—	K. Nallakoya Thangal	—†
DADRA AND NAGAR HAVELI (1)*			
504	—	Sanji Rupji	—†
GOA, DAMAN AND DIU (2)			
505	—	Peter Augustus Alvares	MG
506	—	Mukund Padmanaba Shinkre	MG
PONDICHERRY (1)			
507	—	Ku Sivappraghassan	Con.
NORTH-EAST FRONTIER TRACT (1)*			
508	—	D. Ering	—†
ANGLO-INDIANS (2)*			
509	—	Frank Anthony	—
510	—	A. E. T. Barrow	—

Functions and Powers of Parliament

The main functions of Parliament are to make laws for the country, to make finances available for the needs of the Government and appropriate funds necessary for the services of the State. The Council of Ministers is collectively responsible to the House of the People which also votes the salaries and allowances of Ministers and can force the resignation of the Council of Ministers by refusing to pass the budget or any other major legislative measure or by adopting a vote of no-confidence. Parliament is also vested with the power to impeach the President and to remove judges of the Supreme Court and High Courts, the Chief Election Commissioner and the Comptroller and Auditor-General in accordance with the procedure laid down in the Constitution.

All legislation requires the consent of both Houses of Parliament. Delegated legislation is also subject to review and control by Parliament. Although all financial legislation must be recommended by the President, the House of the People alone can sanction grants, appropriations and proposals for taxation. Parliament's power to debate public questions and to review the work of the different departments of the Government is unfettered by any limitations except those imposed by the Constitution or by its own rules of procedure. In times of an emergency declared under Article 352*, the legislative authority of Parliament also extends to the matters enumerated in the State List. The Power to amend the Constitution also vests solely in Parliament.

*For the first time, the President of India declared a state of emergency under this Article on October 26, 1962, following the threat to the security of India created by the Chinese aggression.

Parliamentary Committee

To assist Parliament in its deliberations, Parliamentary Committees are appointed either on a motion by the respective Houses themselves or by their presiding officers. Committees fall under three groups : those of a general nature concerned mainly with the organisation and powers of the House, those assisting the Houses in their legislative functions, and committees with financial functions. In the first category fall the Committees on Rules, Privileges, Absence of Members and the Business Advisory Committees, etc. The legislative committees include Select Committees of either House and Joint Select Committees of the two Houses, set up *ad hoc* for the consideration of important bills. The two important committees in the third category are the Public Accounts Committee and the Estimates Committee. While the first of those is composed of members from both Houses, the membership of the second is confined only to the Lok Sabha.

The Public Accounts Committee scrutinises the Appropriation Accounts of the Government of India and the report of the Comptroller and Auditor-General thereon. It ensures that public money is spent in accordance with Parliament's decisions and calls attention to cases of waste, extravagance, loss, nugatory expenditure or lack of financial integrity in public services. The Estimates Committee reports on "what economies, improvements in organisation, efficiency and administrative reform consistent with the policy underlying the estimates may be effected." It also examines whether the money provided in the estimates is well laid out and suggests the form in which estimates shall be presented to Parliament. Another important committee of the Lok Sabha is the Committee on Government Assurances. Its function is to scrutinise the assurances given by Ministers on the floor of the House and to report on the manner in which such assurances have been implemented. Ministers are debarred from being members of these three committees.

Informal Consultations

There are Informal Consultative Committees for different Ministries which provide a forum for informal discussions between Members of Parliament and the Ministries of the Government on matters of policy and the working of administrative departments. Membership of these committees is based upon preferences indicated by members themselves. These committees do not generally work on the basis of a formal agenda, rules of procedure or recorded proceedings.

JUDICIARY

Supreme Court of India

The Supreme Court of India consists of a Chief Justice and not more than thirteen Judges appointed by the President. The Judges hold office till the age of 65. For appointment as a Judge of the Supreme Court, a person must be a citizen of India and must have been for at least five years a Judge of a High Court or of two or more such courts in succession; or an advocate of a High Court or of two or more such courts in succession for at least ten years; or he must be in the opinion of the President, a distinguished jurist. Provision has also been made for the appointment of a Judge of a High Court as an *ad hoc* Judge of the Supreme Court and for retired judges of the Supreme Court or High Courts to sit and act as Judges of that Court. The Constitution debar a retired judge of the Supreme Court from practising in any court of law or before any other authority in India.

A Judge of the Supreme Court cannot be removed from office except by an order of the President passed after an address by each House of Parliament, supported by a majority of the total membership of that House

and by a majority of not less than two-thirds of the members present and voting, has been presented to the President in the same session for such removal on the ground of proved misbehaviour or incapacity.

The membership of the Court, as on April 30, 1964, was as follows :

Chief Justice : P. B. Gajendragadkar

Judges : A. K. Sarkar

K. Subba Rao

K. N. Wanchoo

M. Hidayatullah

K. C. Das Gupta

J. C. Shah

Rabhubar Dayal

N. Rajagopala Ayyangar

J. R. Mudholkar

S. M. Sikri

The following are the Law officers of the Union Government :

Attorney-General of India : C. K. Daphtary

Solicitor-General of India : H. N. Sanyal

Additional Solicitor-General of India : S. V. Gupte

Jurisdiction

The Supreme Court has both original and appellate jurisdiction. Its exclusive original jurisdiction extends to all disputes between the Union and one or more States or between two or more States *inter se*. In addition to this, Article 32 of the Constitution gives an extensive original jurisdiction to the Supreme Court in regard to the enforcement of fundamental rights guaranteed under Part III of the Constitution. It is empowered to issue directions or orders or writs including those in the nature of writs of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari*, whichever may be appropriate, to enforce these rights.

The appellate jurisdiction of the Supreme Court can be invoked, by a certificate of the High Court concerned or by special leave granted by the Supreme Court, in respect of any judgment, decree or final order of the High Court in cases involving substantial questions of law as to the interpretation of the Constitution. Appeals also lie to the Supreme Court in civil matters where the amount or value of the subject matter of the dispute is not less than Rs. 20,000 or where the judgment, decree or final order involves claims respecting property of like amount, or where the High Court concerned certifies that the case is a fit one for appeal to the Supreme Court. In criminal cases, the right to appeal to the Supreme Court has been provided for, "if the High Court (a) has on appeal reversed an order of acquittal of an accused person and sentenced him to death; (b) has withdrawn for trial before itself any case from any court subordinate to its authority and has in such trial convicted the accused person and sentenced him to death; or (c) certifies that the case is a fit one for appeal to the Supreme Court." Parliament is authorised to confer on the Supreme Court any further powers to hear and entertain appeals from any judgment, final order or sentence in a criminal proceeding of a High Court in Indian territory.

Besides this the Supreme Court has a very wide appellate jurisdiction over all courts and tribunals in India inasmuch as it can grant special leave to appeal from any judgment, decree, determination, sentence or order in any case or matter passed or made by any court or tribunal in the territory of India. It has also a special advisory jurisdiction in matters which may specifically be referred to it by the President under Article 143 of the Constitution.

THE STATES

The system of Government in the States as embodied in Part VI of the Constitution, closely resembles that of the Union.

EXECUTIVE

The State Executive consists of the Governor and a Council of Ministers with a Chief Minister at its head.

The Governor of a State is appointed by the President of India for a term of five years and holds office during his pleasure. Only Indian citizens above 35 years of age are eligible for appointment to this office. The Governor is the head in each State and all executive actions of the State are taken in his name. The Governor's discretionary powers relate to the making of reports to the Union President about (i) the administration of Scheduled Areas, if any, in his State, and (ii) the breakdown of the constitutional machinery in his State.

Council of Ministers

The Constitution provides for a Council of Ministers with a Chief Minister at the head to aid and advise the Governor in the exercise of his functions except in so far as he is, by or under the Constitution, required to exercise his functions in his discretion. The Chief Minister is appointed by the Governor, who also appoints other Ministers on the advice of the Chief Minister. The Council of Ministers, which holds office during the pleasure of the Governor, is collectively responsible to the Legislative Assembly of the State.

Administrative Units

The principal unit of administration in a State is the district under a Collector and District Magistrate. As Collector, he is responsible to the Commissioner who heads a Division or to the Board of Revenue (depending upon the practice obtaining in a particular State), and through that agency to the Government, for the proper collection of revenue and for the administration of all matters connected with land other than irrigation, agriculture and forestry in their technical aspects and registration. As District Magistrate, he is responsible for the maintenance of law and order and the criminal administration of the district. For this purpose, the police force in the district with the Superintendent of Police as its immediate head is under his control and direction, although for purposes of disciplinary control and technical supervision, the Superintendent is responsible to the Inspector-General of Police. Besides a number of Assistant or Deputy Collectors and Magistrates who help him in the discharge of his duties, the Collector has also at his disposal the assistance and professional advice of a number of other district officers such as the Executive Engineer, the Deputy Commissioner of Excise, the Civil Supplies Officer and the District Development or Planning Officer.

Co-ordination for purposes of development programmes at State headquarters is achieved through an inter-departmental Committee of Secretaries in charge of various development departments with the Chief Secretary or the Secretary in charge of planning as the chairman. Generally, the functions of co-ordination for planning and for the implementation of programmes in the districts are combined in a single officer commonly described as the Development Commissioner. As a rule, a Committee of the State Cabinet under the Chief Minister provides overall guidance and direction. State Planning Boards which include leading non-officials have also been constituted in most of the States.

LEGISLATURE

For every State there is a Legislature which consists of the Governor and the two Houses (except in the case of Assam, Gujarat, Kerala, Orissa,

Control over Executive

Besides exercising the usual power of financial control, the State legislatures use all the normal parliamentary devices like questions, discussions, debates, adjournment and no-confidence motions and resolutions, etc., to keep a watch over the day-to-day work of the Executive. They also have their Committees on Estimates and Public Accounts to ensure that grants sanctioned by the Legislature are properly utilised.

JUDICIARY

High Courts

There is a High Court in each State which stands at the head of the State's judicial administration. Each High Court consists of a Chief Justice and such other judges as the President may, from time to time, deem necessary to appoint. The Chief Justice of a High Court is appointed by the President in consultation with the Chief Justice of India and the Governor of the State. The procedure for appointing other judges is the same except that the Chief Justice of the High Court concerned is also consulted. They hold office until they attain the age of 60 and are removable in the same manner as a judge of the Supreme Court of India. To be eligible for appointment as a judge, one must have held a judicial office in India for ten years or must have practised as an advocate of a High Court or of two or more such courts in succession for a similar period.

The table below gives the name, seat and territorial jurisdiction of the fifteen High Courts in India.

TABLE 22
JURISDICTION AND SEAT OF HIGH COURTS

No.	Name	Year of establishment	Territorial Jurisdiction	Seat of the Court
1	Allahabad	1919	Uttar Pradesh	Allahabad (Bench at Lucknow)
2	Andhra Pradesh ..	1954	Andhra Pradesh	Hyderabad
3	Assam and Nagaland*	1948*	Assam and Nagaland	Gauhati
4	Bombay	1861	Maharashtra	Bombay (Bench at Nagpur)
5	Calcutta	1861	West Bengal, Andaman and Nicobar Islands	Calcutta
6	Gujarat	1960	Gujarat	Ahmedabad
7	Jammu & Kashmir ..	1928	Jammu & Kashmir	Srinagar and Jammu
8	Kerala	1956	Kerala, Laccadive, Minicoy and Amindivi Islands	Ernakulam
9	Madhya Pradesh ..	1956	Madhya Pradesh	Jabalpur (Benches at Indore and Gwalior)
10	Madras	1861	Madras and Pondicherry	Madras
11	Mysore	1884	Mysore	Bangalore
12	Orissa	1948	Orissa	Cuttack
13	Patna	1916	Bihar	Patna
14	Punjab	1947	Punjab and Delhi	Chandigarh (Bench at Delhi)
15	Rajasthan	1949	Rajasthan	Jodhpur

Under Article 226, every High Court has the power to issue to any person or authority, including any Government within its jurisdiction, directions, orders or writs, including writs which are in the nature of *habeas*

*The jurisdiction of the former Assam High Court was extended to cover the State of Nagaland, constituted on December 1, 1963, and the name of the Court changed accordingly with effect from the same date.

corpus, mandamus, prohibition, quo warranto and certiorari, or any of them for the enforcement of any of the rights conferred by Part III of the Constitution and for any other purpose.

This power may also be exercised by any High Court exercising jurisdiction in relation to the territories within which the cause of action, wholly or in part, arises for the exercise of such power, notwithstanding that the seat of such Government or authority or the residence of such person is not within those territories.

The High Courts have powers of superintendence over all courts and tribunals within their jurisdiction (Article 227). They can call for returns from such courts, make and issue general rules and prescribe forms to regulate their practices and proceedings and determine the manner and form in which books, entries and accounts shall be kept.

Subordinate Courts

Subject to minor local variations, the structure and functions of the subordinate courts are more or less uniform throughout the country. Each State is divided into a number of districts, each under the jurisdiction of the principal civil court presided over by a district judge. Subordinate to him is a hierarchy of different grades of civil judicial authorities.

Besides hearing suits, properly so called, the civil courts exercise jurisdiction over several other matters, such as guardianship, marriage and divorce, testamentary and intestate representation and admiralty jurisdiction. In another category of cases, such as those pertaining to the Land Acquisition Act and the Forest Act, questions affecting civil rights are, in the first instance, dealt with by administrative officers or tribunals, but their decisions are subject to the appellate authority of the appropriate civil courts.

The Code of Criminal Procedure, as amended and revised from time to time, regulates the administration of criminal justice and the constitution of criminal courts. The officer presiding over the district court in civil suits is the judge of the Sessions Division for criminal cases in that district. The Sessions Judge is sometimes assisted by additional or assistant sessions judges. These officers are subordinate only to the High Court and are generally independent of the executive. They, however, deal only with the more serious crimes and take cognisance of cases only when they have been committed to them by a magistrate after a preliminary enquiry.

The exercise of preventive jurisdiction in certain matters and the trial of crimes listed as not triable by a Sessions Court are entrusted to magistrates of various classes under the general supervision and control of the District Magistrate. In respect of nearly all judicial acts, the magistracy, including the District Magistrate, is subject to the control of the High Court. Some categories of cases involving minor crimes are tried by honorary magistrates, generally retired officers or other responsible citizens, and by benches of magistrates.

LOCAL GOVERNMENT

Local self-governing institutions are broadly classified into two categories—urban and rural. In the big cities they are known as Corporations, and in medium and small towns as Municipal Committees or Boards. The pattern of local government in rural areas has recently been changed and a three-tier structure, popularly known as 'Panchayati Raj', is being introduced in the various States.

Corporations

The corporations, established under specific Acts of the State Legislatures, are headed by elected Mayors. The administration of a city under

a corporation is entrusted to three authorities : (i) the General Council of the Corporation; (ii) the Standing Committees of the Council; and (iii) the Commissioner or Executive Officer. The General Council appoints all the officers of the corporation except the Commissioner who is usually appointed by the State Government. The Standing Committees elected by the Council carry out the main work of the administration covering taxation and finance, engineering works, health and education. The executive power of the corporation vests in the Commissioner, who prescribes the duties of the various establishments and supervises their work. In addition to matters connected with the safety, health, education and other conveniences of the citizens, the jurisdiction of the corporation also extends to the maintenance of streets and bridges, avenues and parks, recreation grounds and markets.

Municipal Boards and Committees

Municipalities with elected Presidents also function through committees. All the members of a municipality constitute its general body which discusses and decides all questions of policy and important details of municipal administration. The powers of passing the budget, imposing taxation, voting expenditure and making rules and regulations vest in the general body. The day-to-day work of the municipality is carried on by an executive officer, drawn either from the State cadre of municipal executive officers or from the State Civil Service.

Local Self-Government in Districts

The new system of Panchayati Raj or democratic decentralisation involves a three-tier structure of local self-governing bodies at the village, block and the district levels. Specific powers and functions in the field of development and local administration have been assigned to the Panchayati Raj institutions. Panchayati Raj is under implementation in Andhra Pradesh, Assam, Bihar, Gujarat, Madras, Maharashtra, Mysore, Orissa, Punjab, Rajanathan and Uttar Pradesh and the remaining States have either enacted or are in the process of enacting legislation to introduce a similar system.

Village Panchayats

Panchayats are elected by Gram Sabhas consisting of the entire adult population of the village. Elected by and from among the villagers, they are responsible for agricultural production, rural industries, medical relief, maternity and child welfare, management of common grazing grounds, maintenance of village roads, streets, tanks and wells and provision of sanitation, drainage, etc. In some places panchayats also look after primary education, the maintenance of village records and the collection of land revenue. For building up funds they levy taxes on houses and lands, fairs and festivals and sale of goods, impose octroi duties, and build up remunerative community assets. There are now 2,05,452 village panchayats functioning in the country, covering approximately 97 per cent of the entire rural population.

While the administrative, civil and executive functions at the village level are attended to by the panchayat, the judicial functions are exercised by a separate body known as *Nyaya Panchayat*. These latter bodies are competent to try cases involving minor offences under the Indian Penal Code and other special and local laws. Their powers of punishment are limited to the imposition of moderate fines, and they employ simple and summary procedure for the disposal of cases. They have also been given limited powers under the Civil Procedure Code. Legal practitioners are not permitted to appear before them.

CHAPTER IV

DEFENCE

The supreme command of the Armed Forces is vested in the President of India, the responsibility for their administrative and operational control resting with the Ministry of Defence and the three Services Headquarters. The main function of the Ministry is to ensure that (i) the development and activities of the three Services are properly co-ordinated, (ii) decisions on policy matters are obtained from the Government, transmitted to the three Services Headquarters and implemented, and (iii) necessary financial sanction for defence expenditure is obtained from Parliament.*

ORGANISATION

Although the overall control of the three Services vests in the Ministry of Defence, they normally function directly under their respective Chiefs of Staff. The occupants of these offices, as on April 30, 1964, were :

<i>Chief of the Army Staff</i>	..	General J. N. Chaudhuri
<i>Chief of the Naval Staff</i>	..	Vice-Admiral B. S. Soman
<i>Chief of the Air Staff</i>	..	Air Marshal A. M. Engineer

Army

The Army is organised into four Commands—Western, Eastern, Southern and Central—each under a General Officer Commanding-in-Chief of the rank of Lieutenant-General. The Commands are divided into Areas, each under a General Officer Commanding of the rank of Major-General. The areas are sub-divided into Sub-Areas, each under a Brigadier.

The Army Headquarters, located in Delhi, functions under the Chief of the Army Staff. Its four main branches, each under a Principal Staff Officer of the rank of Lieutenant-General, are : General Staff Branch, Adjutant-General's Branch, Quartermaster-General's Branch, and Master-General of Ordnance's Branch. The other two branches are the Engineer-in-Chief's Branch and the Military Secretary's Branch, each under a Major-General.

The General Staff Branch consists of the Directorates of Military Operations, Military Intelligence, Staff Duties, Military Training, Armoured Corps, Artillery, Signals, Infantry, Territorial Army, Defence Security Corps and Border Roads.

The Adjutant-General's Branch is divided into two Directorates, namely, Organisation and Personal Services and includes the Judge Advocate-General's Department. The Medical Directorate, though separate under a Major-General, is technically placed under this branch.

The Quartermaster-General's Branch has two Directorates, one to organise all rail, sea and air movements of personnel and stores within and outside the country, and the other to provide accommodation for personnel. The Directorates of Supply and Transport, Remounts and Veterinary, Military Farms and Postal Services are also under the overall supervision of the Quartermaster-General.

The three Directorates under the Master-General of Ordnance are Ordnance Services, Weapons and Equipment and Electrical and Mechanical

*See Appendices for the National Defence Council set up to deal with the emergency created by the Chinese aggression.

Engineers. The Ordnance Services Directorate is responsible for procuring, stocking and supplying all kinds of defence equipment required for troops. The Electrical and Mechanical Engineers Directorate is charged with the responsibility of inspection, repair and maintenance of all types of mechanical and electrical equipment used by the Army.

The Engineer-in-Chief is the head of the Corps of Engineers. He advises the Chiefs of Staff of the three Services and the Director-General of Ordnance Factories on all matters concerning works, including their planning and construction. He has five Directorates under him, namely, Personnel, Engineer Staff, Engineer Stores, Plants and Works and Survey.

The Military Secretary maintains personal records of officers and is responsible for their postings and transfers, promotions and retirement as well as for the grant of honorary ranks.

Navy

At the Naval Headquarters in Delhi, the Chief of the Naval Staff is assisted by four Principal Staff Officers, namely, the Deputy Chief of the Naval Staff, the Chief of Personnel, the Chief of Material and the Chief of Naval Aviation. He functions through four Operational and Administrative Commands, one afloat and three ashore. These are : (i) Flag Officer Commanding, Indian Fleet, (ii) Flag Officer, Bombay, (iii) Commodore-in-Charge, Cochin, and (iv) Commodore, East Coast, Visakhapatnam.

Today, the Indian Fleet consists of *INS Vikrant* (Flagship of the Navy), an aircraft-carrier, *INS Mysore*, a Colony-class cruiser, *INS Delhi*, a Leander-class cruiser, two Destroyer Squadrons, (*INS Ranjit*, *Rajput*, *Rana*, *Godavari*, *Gomati* and *Ganga*) and a number of Frigate Squadrons, including some of the latest types of anti-submarine and anti-aircraft frigates. These new types of frigates, specially constructed for the Navy in the UK, are *INS Brahmaputra*, *Beas*, *Betwa*, *Khukri*, *Kirpan*, *Kuthar*, *Talwar* and *Trisul*. The former frigates are *INS Cauvery*, *Kistna* and *Tir*, which are now being used for cadets' training. The three Mine-sweeping Squadrons are formed by *INS Konkan*, *Karwar*, *Kakinada*, *Cannanore*, *Cuddalore*,

Bassein and *Bimlipatam*.

A beginning has been made in building smaller types of naval craft in India. Three seaward defence boats—*INS Ajay*, *Abhay* and *Akshay* and a mooring vessel, *INS Dhruvak*, have already been completed.

A newly-constructed Cruiser Graving Dock at the Naval Dockyard, Bombay, which can also accommodate the Navy's aircraft-carrier, was commissioned for service in January 1962. Work is fast progressing on the extension of the Ballard Pier adjacent to the present Naval Dockyard in Bombay. A new jetty is also being constructed at Visakhapatnam on the east coast.

Two new naval establishments, *INS Jarawa* and *INS Gomantak*, were commissioned on February 15 and March 7, 1964, respectively. A Resident Naval Officers' Organisation at Port Blair in the Andaman and Nicobar Islands, *INS Jarawa* is equipped with necessary transport and communications facilities to enable the naval garrison stationed there to patrol the various islands in the area. Proposed to be developed as a full-fledged naval base, *INS Gomantak* at Marmagao includes the Naval Air Station at Dabolim.

Air Force

The Chief of the Air Staff is assisted by five Principal Staff Officers controlling the main branches of the Air Headquarters, viz., the Vice-Chief of the Air Staff, the Deputy Chief of the Air Staff, the Air Officer-in-Charge, Administration, the Air Officer-in-Charge, Maintenance, and the Air Officer-in-Charge, Policy and Plans. Each of these branches controls a group of Directorates.

Under the Air Headquarters come five major Air Force formations, namely, the Western Air, Training, Maintenance, and Eastern Air and the Central Air Commands.

In pursuance of the Reserve and Auxiliary Air Forces Act, passed by Parliament in 1952, seven Auxiliary Air Force Squadrons, namely, No. 51 (Delhi), No. 52 (Bombay), No. 53 (Madras), No. 54 (UP), No. 55 (Bengal), No. 56 (Orissa) and No. 57 (Punjab), have been formed. The personnel of all these squadrons are at the moment serving with the Regular Air Force.

The Air Force fleet consists of a variety of transport, fighter and bomber aircraft. Among the fighter aircraft in use are the Vampires, Toofanis, Mysteres, Hunters, Gnats and MIG 21s.

The transport fleet, which till a few years ago consisted mainly of Dakotas and Fairchild Packets, has been modernised and now includes Otters, An-12s, and some Caribous. The helicopter fleet consists mainly of MI-4s, Bell and Alouette-II helicopters. India-built HT-2, the T6G Texan and the Vampires are used for training purposes.

TRAINING INSTITUTIONS

National Defence College

The National Defence College, set up at New Delhi in 1960, trains senior officers of the three Services, on the pattern of the Imperial Defence College in the UK. Its main purpose is to enable students to study the military, scientific, industrial, social, economic and political factors involved in war as also the higher direction and strategy of warfare. Concurrently with this study, it offers a unique opportunity to senior Service officers and highly placed civil servants of getting together and exchanging ideas so as to give them a better understanding of each other's problems in peace and in war.

National Defence Academy

Admissions to the National Defence Academy, Khadakvasla, are made on the basis of a qualifying biannual written examination conducted by the Union Public Service Commission at different centres in the country, followed by an interview before a Services Selection Board. Boys who have passed the Matriculation or an equivalent examination and are between 15 and 17½ years of age on the first day of the month in which the course starts at the Academy are eligible for admission. Cadets must be unmarried and cannot marry during the period of their stay at the Academy.

All the expenses of the cadets while at the Academy, except the pocket expense of Rs. 30 per month, are borne by the Government. Where the monthly income of parents is less than Rs. 300, even this expense is borne by the Government.

The Academy conducts a three-year course for the combined basic training of cadets of all the three Services after which they separate to receive specialised training at their respective Service establishments.

Defence Services Staff College

Training is imparted to serving officers on an inter-Service basis at the Defence Services Staff College, Wellington. It trains officers up to the standard required for second-grade staff appointments. About 100 officers of all the three Services are trained every year, the duration of the course being 10 months.

Armed Forces Medical College

The Armed Forces Medical College, Poona, besides imparting training to newly commissioned medical officers, runs refresher courses for medical

officers of the Armed Forces to keep them up-to-date in their profession. Specialist courses are run in hygiene, X-ray, blood-transfusion and pathology. It also now runs an M.B. B.S. course.

Rashtriya Indian Military College

Run on the lines of public schools, the Rashtriya Indian Military College, Dehra Dun, prepares future officers for the three Services by imparting preliminary pre-cadet training to such pupils as desire subsequently to choose a military career. It thus serves as a feeder to the National Defence Academy.

Army Colleges and Schools

The Indian Military Academy, Dehra Dun, is the premier centre for training officers of the Army. The main source of entry into the Academy is the National Defence Academy. Cadets passing out of the Academy receive one year's training at Dehra Dun before being commissioned. The other categories of entrants in higher age-groups are those who have qualified in the competitive entrance examination of the Union Public Service Commission and the Services Selection Board for two years' training, graduate cadets of the NCC for a year and a half, other graduates selected for specialised commissions in the technical arms for a year and serving Regular or Territorial Army personnel—JCOs and NCOs—for two years. At the Military Academy, cadets undergo strenuous training designed mostly to equip them with the basic military knowledge necessary for all Army officers whatever their corps, arm or service.

Two Officers' Training Schools have been set up, one at Poona and the other at Madras, to train emergency commission candidates for the Army. The period of training is six months, after which candidates proceed to the Indian Military Academy or other specialised training establishments.

The Armoured Corps Centre and School, Ahmednagar, undertakes the training of regimental instructors, squadron commanders and regimental commanders of the Corps. The College of Military Engineering, Kirkee, imparts training to officers and other ranks in all aspects of military engineering. Longer courses of over two years' duration are also conducted there to train officers up to the degree standard.

The School of Signals at Mhow imparts basic and advanced technical training in telecommunication and signal tactics. The School of Artillery at Deolali provides training in field, anti-tank and anti-aircraft artillery, while its branch at Bombay provides training in coastal artillery. The Infantry School at Mhow conducts courses in the tactical and administrative handling of units and sub-units for senior officers and junior commanders of all corps in the Army. The Ordnance School at Jabalpur imparts specialised corps training in the identification, handling, storage, care, custody and preservation of all items, including ammunition and explosives, stocked by ordnance depots.

The other Army training centres and schools are : the Service Corps School, Bareilly; the Remounts and Veterinary Centre and School, Meerut; the School of Physical Training, Poona; the Army and Air Transport Support School, Agra; the School of Mechanical Transport, Faizabad; the Corps of Military Police Centre and School, Faizabad; the Education Centre and School, Pachmarhi; the Military School of Music, Pachmarhi; and the Electrical and Mechanical Engineering School, Trimulgherry.

Naval Training Centres

Except for highly specialised technical courses, training of all officers and men of the Navy is undertaken at the main naval training centres located at Cochin, Bombay and Visakhapatnam. Advanced courses in

subjects like gunnery, torpedo and anti-submarine and communications have already been started.

The principal training centres of the Navy are *INS Venduruthy* and the Naval Air Station *Garuda*, both situated at Cochin. *INS Venduruthy* is the premier training establishment, comprising technical schools for gunnery, communication, navigation and torpedo and anti-submarine. *INS Garuda* has the training aircraft of the Navy and some technical schools.

At *INS Shivaji*, Lonavla (Maharashtra), mechanical engineers and artificers are trained. A new Engineering College has been started there to train junior engineers and electrical officers of the Service.

INS Valsura, Jamnagar, trains officers and men of the Electrical Branch of the Service. With most of the ships now acquired being fitted with complicated electronic equipment, training at this School has been geared to the present requirements of the Service.

New recruits coming into the Navy are trained at *INS Circars*, Visakhapatnam, and, on completion of their courses, become sailors. Officers and men of the Supply and Secretariat Branch are trained at *INS Hamla* in Bombay. Sea training is imparted by the Fleet.

Air Force Colleges and Schools

The basic flying training of a year's duration for pupil pilots is imparted at the Air Force Flying College, Jodhpur, and at the Pilot Training Establishment, Allahabad. Advanced flying and conversion training on jets and multi-engined aircraft is conducted for a year at the Jet Training and Transport Training Wings of the Air Force Station, Hyderabad. Pupil navigators also have their initial training at Jodhpur and advanced training at Hyderabad before graduating as full-fledged aircrew.

The Air Force Administrative College, Coimbatore, trains officers in various ground duties, and medical officers receive training at the School of Aviation Medicine, Bangalore. The Air Force Technical College, Jalahalli, trains officers in engineering, signals and armament and electrical engineering. A school at Jalahalli trains airmen in accounting, equipment, general office duties, medical assistance, telephone operating, drill instruction, police duties, music, motor driving and catering. Another school, also located at Jalahalli, trains airmen in higher signal trades. Flying instructors are trained in a separate school at Tambaram. Another school, located at Tambaram, trains airmen in technical trades. A school for higher staff studies in combined land-air warfare has been instituted at Hyderabad. Paratroopers for air-borne units of the Army are trained at the Paratroopers Training School, Agra.

DEFENCE RESEARCH AND PRODUCTION

In the middle of 1962, the Government of India set up a Defence Research and Development Council, with the Defence Minister as Chairman. The Council co-ordinates and directs scientific research to help develop contemporary weapons and equipment and evolve scientific techniques and methods for effective training and operational efficiency. The Council has under it the Defence Research and Development Organisation, headed by the Scientific Adviser.

The Research and Development Organisation was created in January 1958 by the amalgamation of the Technical Development Establishments of the three Services and the Defence Science Organisation to promote and apply scientific research to production. It is closely associated with the Production Organisation which functions under the Controller-General of Defence Production and is responsible for achieving self-sufficiency in military stores and equipment. The Organisation (a) renders scientific advice

to Service Headquarters, (b) carries out applied research to solve the problems of the Services, (c) designs and develops weapons and equipment based on the operational requirements defined by the Services, (d) evaluates and carries out technical trials of new weapons and equipment or those developed in the country, and (e) renders technical guidance to civil trade for the development of new equipment. It also undertakes basic, applied and operational research and development of products and processes related to fabrication of instruments, weapons, ammunition, engineering stores and tele-communication equipment.

There are at present more than 30 institutions, major and minor, under the Research and Development Organisation, catering to the needs of the Armed Forces. Among the new establishments are the Institute of Nuclear Medicine, the Defence Institute of Physiology, the Defence Food Research Laboratory, the Solid State Physics Laboratory, the Defence Electronics Research Laboratory and the Institute of Works Studies.

With the growing tempo of Defence research and production, a scheme has been evolved to impart theoretical knowledge of engineering subjects to those receiving practical training at various defence installations. Nearly 3,000 students are at present receiving this instructional training.

Ordnance Factories

During 1962-63, the Ordnance Factories produced stores and equipment worth Rs. 63.90 crores as against Rs. 33.35 crores in 1960-61 and Rs. 41.88 crores in 1961-62. During the first half of 1963-64, the value of issues from the Ordnance Factories was Rs. 51.71 crores and the total for the year is expected to exceed Rs. 100 crores. The steadily increasing manufacture of special items, hitherto imported, has resulted in substantial savings of foreign exchange.

The Service items produced by these factories include artillery guns, heavy mortars, naval guns, barrels and recoil-less guns, mountings, carriages and buffers for heavy and medium-calibre guns, light machine-guns and other small arms, bombs, shells and various types of ammunition and high explosives, sea mines, depth-charges, parachutes, service clothing and mountaineering equipment. They recently started manufacturing three-ton and one-ton military trucks, jeeps and four types of tractors.

Four new Ordnance Factories, namely, a Heavy Vehicles (Tank) Factory, a Marine Diesel Factory and a Parachute Factory at Madras and an Electrical Cable Factory at Chandigarh, have been set up.

Hindustan Aircraft

The Hindustan Aircraft Ltd., Bangalore, undertakes the repair, overhaul and manufacture of aircraft for the Indian Air Force. Since 1952, the HAL has been manufacturing the HT-2 trainer aircraft on a large scale for the IAF, the Navy and the flying clubs. The factory has also been building supersonic jet aircraft (HF-24), the first prototype of which was test-flown in July 1961, and Vampire jet fighters, which form part of the fleet of the IAF. It is also producing jet trainers and the turbo-jet engines to be fitted to them. It has designed and developed a light 4-seater aircraft (*Krishak*), a light multi-purpose aircraft (*Pushpak*), and a six-cylinder piston aero-engine.

In 1956 an agreement was concluded with the Bristol Aero-engine Factory to make the full range of Bristol Orpheus turbo-jet engines at the HAL. Another licence agreement was reached with the Folland Aircraft Company for the manufacture by the HAL of Britain's jet-fighter, the Gnat, the same year. The HAL was recently entrusted with the manufacture of Alouette helicopters under licence from the Sud Aviation Co. of France,

This factory has also been entrusted with the manufacture of Artouste engines which will power these helicopters.

The ancillary activities of HAL include the building of all-metal broad gauge coaches with modern amenities for the Railways.

The IAF Aircraft Manufacturing Depot, Kanpur, has undertaken the production of AVRO—748 which is the first feeder-line aircraft designed on the fail-safe principles. The pressurised low-wing monoplane is powered by two Rolls-Royce Dart propeller-turbine engines, now under progressive manufacture at the HAL, and operates at comparatively low costs. This transport aircraft is intended to replace the Dakota now in service with the Air Force.

Bharat Electronics

The Bharat Electronics Ltd., Jalahalli (near Bangalore), went into initial production in January 1956, and started manufacturing tools and jigs required for receivers and transmitters.

The production programme of the BEL includes the manufacture of general purpose receivers and medium-power transmitters for the Civil Aviation Department and equipment for All India Radio, Railways, Meteorological Department, States' Police, Fire Services and the Armed Forces.

Some other important items under production at the BEL are general-purpose communication receivers, medium-power transmitters, mobile trans-receivers and portable man-pack sets.

SPECIAL ASSIGNMENTS

In addition to their normal duty of defending the country, the Armed Forces, from time to time, perform certain emergency duties, such as (i) rendering help in areas affected by natural calamities like floods, earthquakes and famines, (ii) carrying out photographic surveys which are of use in the planning and development of hydro-electric and other schemes, and (iii) reclamation of wasteland. Since independence, India's Defence Forces also assisted in implementing the Korean Truce Agreement and the recommendations of the International Commissions for Supervision and Control in Viet Nam, Laos and Cambodia, set up under the Cease-fire Agreement concluded at Geneva on July 20, 1954. Several officers and other ranks, including some from the Navy and the Air Force, were deputed in September 1954, for this second assignment which still continues. The Army embarked on yet another mission of peace when on November 16, 1956, a contingent was sent to Egypt to join the United Nations Emergency Force. Nearly 70 Service officers served with the UN Observation Group in the Lebanon in 1958. Besides the 700 Service personnel working with the UN Force in the Congo earlier, India sent a brigade of combatant troops with some ancillary units to join that Force in March 1961. In October 1961, India sent six interdicator Canberra jet aircraft to Congo along with the necessary Air Force personnel. In view of the national emergency, the Brigade Group along with some administrative and ancillary units was withdrawn from the Congo in April 1963. A small contingent which still remains there is expected to return by June 1964.

TERRITORIAL ARMY

The Territorial Army, which was raised in October 1949, is designed to give the youth of the country an opportunity of receiving military training in their spare time and to serve the country in times of emergency by providing units to the regular Army and taking over the responsibility for internal security. Membership of the Territorial Army does not involve service outside India except under a special order of the Union Government. The Territorial Army is composed of units of Artillery, Infantry, the Corps of

Engineers (including Railways, Ports, Docks and Inland Waterways), the Corps of Signals (including Posts and Telegraphs), the Medical Corps and the Corps of Electrical and Mechanical Engineers.

Any able-bodied national of India between the ages of 18 and 35 (with relaxation in the upper age-limit for entry into certain technical units) and possessing the requisite qualifications is eligible to join the Territorial Army as an officer or other rank.

The Territorial Army has two types of units—provincial and urban. Training for recruits in the provincial units lasts 30 days. In the urban units training is given for 32 days, in the evenings after working hours, at weekends or on holidays. Every member of the Territorial Army who has undergone recruit training is liable to undergo annual training for two calendar months in the provincial units and for a period varying from a minimum of 144 hours to a maximum of 240 hours in the urban units, including a camp of eight to fourteen days.

While under training or otherwise employed, officers and other ranks of the Territorial Army are entitled practically to the same pay and allowances, rations and medical facilities as are admissible to the corresponding ranks of the regular Army. They are also entitled to terminal gratuity, disability and family pension under certain conditions.

A limited number of appointments on the permanent staff, with a tenure of three to five years, is offered to all ranks of the Territorial Army provided they possess the necessary experience and qualifications. Territorial Army personnel are also entitled to the award of decorations and medals.

The Auxiliary Territorial Army, which was reorganised as the National Volunteer Force in 1954, is now designated as Lok Sahayak Sena.

All able-bodied men, except ex-Servicemen and ex-NCC cadets, between the ages of 18 and 40, can join the Lok Sahayak Sena. Membership of the force carries no liability to military service. Under a new scheme, special attention is given to the training of people in border areas.

Under the Lok Sahayak Sena scheme 1,607 camps were held and 7,18,874 persons given training during the period from May 1955 to December 1963.

NATIONAL CADET CORPS

The National Cadet Corps consists of three Divisions, namely, Senior, Junior and Girls. The Senior and Junior Divisions are composed of three Wings—Army, Navy and Air Force. The Army Wing has units of the Armoured Corps, the Artillery, the Corps of Engineers, the Signals Corps, the Infantry, the Corps of Electrical and Mechanical and the Medical Corps.

In addition to normal basic training, cadets of the technical units receive specialised training. Naval Wing units are, of necessity, raised in the coastal towns where facilities for naval training are available. In the Air Wing units, theoretical and practical training is given in flying and, with the help of the flying clubs, cadets obtain 'A' flying licences at Government expense. Gliding has also been introduced as part of the training of air cadets. The special needs of girl cadets have been fully kept in view and their training has been made more instructive, interesting and useful. Aeromodelling and gliding have also been introduced in the Senior Wing of the Girls' Division.

Participation in the NCC was made compulsory for all able-bodied male college students in 1963. The strength of the Corps, as on January 31, 1964, was 12,23,100. Of this 1,56,500 were in the Senior Division, 7,92,200 in NCC Rifles and 2,74,450 in the Junior Division. The number of girls in the NCC on that date was 89,350.

The Officers Training Units of the NCC train selected officers for joining the Officers' Cadre in the Army.

AUXILIARY CADET CORPS

The Auxiliary Cadet Corps has been started to cope with the demand for military training for boys and girls in schools who cannot get admission to the National Cadet Corps. The Corps has made rapid progress; its strength on January 31, 1964, was 13,62,000.

The Auxiliary Cadet Corps trains the youth of the country in team spirit, discipline and patriotism. Its instructors selected from schools are trained by regular Army staff of the various NCC units.

WELFARE OF EX-SERVICEMEN

The Director of Resettlement in the Defence Ministry deals with matters relating to the resettlement of ex-Servicemen in Government, private services, vocational and technical trades, land colonies and transport services. Training in basic agriculture is given to facilitate their absorption in the community projects as *Gram Sevaks*. In matters of employment, preference is given to ex-Servicemen in filling up appointments in the police, watch and ward, excise and other departments where military training is a qualification. In addition, relaxation in age limits to the extent of the military service rendered has been permitted.

One of the most important non-official organisations which renders useful assistance to ex-Servicemen and their families, in close liaison with the local administrations, is the Soldiers', Sailors' and Airmen's Board. The Board, which has its headquarters in New Delhi, co-ordinates the activities of State boards. These, in their turn, control a network of district boards, having in some cases tehsil or taluk committees. In addition to the funds of the Board which are primarily used for payment of special pensions to blinded ex-Servicemen and to meet expenditure on other miscellaneous items, there are a number of other Central funds like the Flag Day Fund, the Armed Forces Benevolent Fund and the Armed Forces Reconstruction Fund, which also render valuable assistance for the welfare of ex-Servicemen.

CHAPTER V

EDUCATION

Education is primarily the responsibility of the State Governments, the Union Government concerning itself with the co-ordination of educational facilities and determination of standards in respect of higher education (through the University Grants Commission) and research and scientific and technical education. Co-ordination in regard to elementary and secondary education is secured through All-India Councils. The Union Government are also responsible for the running of four universities (Aligarh, Banaras, Delhi and Visva Bharati) and such other institutions of national importance as Parliament may by law declare.

The Central Advisory Board of Education lays down the general education policy. Four standing committees of the Board dealing with elementary, secondary, university and social education, formulate aims and objects, assess present position and draw up future plans in their respective fields. Their activities are co-ordinated by a steering committee of the Board.

The total number of recognised institutions, enrolment therein, the number of teachers and expenditure incurred on them is shown below.*

TABLE 23
INSTITUTIONS, STUDENTS, TEACHERS AND EXPENDITURE

Year	Number of institutions	Number of students on rolls (in lakhs)	Number of teachers (in lakhs)	Direct expenditure (in crores of rupees)	Indirect expenditure (in crores of rupees)	Total expenditure (in crores of rupees)
1950-51	2,86,860	2,55.43	8.04	91.05	23.33	114.38
1955-56	3,66,641	3,39.24	11.07	144.81	44.85	189.66
1960-61	4,72,655	4,79.63	15.08	257.17	86.94	344.11
1961-62** ..	6,85,938	5,39.01	16.44	291.71	100.23	391.94

The break-up of the number of institutions and students according to management in 1960-61 was as follows : Government 96,829 with 97,55,459 students; district boards 2,06,286 with 1,86,25,754 students; municipalities 12,687 with 34,70,666 students; private aided 1,43,985 with 1,46,42,666 students and private unaided 12,868 with 14,68,593 students.

The contributions from different sources to the total expenditure are shown in Table 24.

TABLE 24
SOURCES OF EXPENDITURE***

Source	(in crores of rupees)			
	1950-51	1955-56	1960-61	1961-62**
Government funds	65.27 (57.1)	117.20 (61.8)	233.9 (68.0)	267.5 (68.2)
District boards funds	7.86 (6.9)	9.90 (5.2)	11.8 (3.4)	14.2 (3.6)
Municipal boards funds	4.64 (4.0)	6.46 (3.4)	10.7 (3.1)	12.1 (3.1)
Fees	23.33 (20.4)	37.90 (20.0)	59.0 (17.1)	65.4 (16.7)
Endowments	2.46 (2.2)	5.69 (3.0)	9.8 (2.9)	10.0 (2.6)
Others	10.82 (9.4)	12.51 (6.6)	18.9 (5.5)	22.7 (5.8)
TOTAL :	114.38	189.66	344.1	391.9

*Figures for unrecognised institutions are not available.

**Provisional.

***Figures in brackets represent percentages to total expenditure.

Plans and Education

A working partnership has been evolved between the Centre and the State Governments to implement development plans of education. Most of the schemes are formulated and implemented by the State Governments with some assistance from the Centre. Of the centrally sponsored schemes, some are implemented through the State Governments and others directly by the Central Government. A central planning group, with Union Minister for Education as its Chairman, is already working on a long term development plan covering the period 1966—81. The distribution of outlay in the First, Second and Third Plans is set out below.

TABLE 25
EXPENDITURE UNDER THE PLANS
(in crores of rupees)

	First Plan	Second Plan	Third Plan (outlay)
Elementary education	85	95	209
Secondary education	20	51	88
University education	14	48	82
Other educational schemes	14	27	29
TOTAL :	133	221	408

The achievements under the First and Second Plans and the targets aimed at under the Third Plan are indicated below.

TABLE 26
ACHIEVEMENTS AND TARGETS

	1950-51	1955-56	1960-61	1965-66 (targets)
Number of pupils in classes I to V (in lakhs)	1.92	2.52	3.50	4.96
Percentage thereof to total population of the age group 6-11	42.6	52.9	62.4	76.4
Number of pupils in classes VI to VIII (in lakhs)	31	43	67	98
Percentage thereof to total population of the age group 11-14	12.7	16.5	22.6	28.6
Number of pupils in classes IX to XI (in lakhs)	12	19	29	46
Percentage thereof to total population of the age group 14-17	5.3	7.8	10.6	15.6
Number of pupils at the university stage—arts, science and commerce—(in lakhs)	4	6	9	13
Percentage thereof to total population in the age group 17-23	0.9	1.5	1.8	2.4
Percentage of students reading science at university stage	38.1	33.0	34.1	42.5
Number of primary/junior basic schools	2,09,671	2,78,135	3,30,399	4,15,000
Number of middle/senior basic schools ..	13,596	21,730	49,663	57,700
Number of high/higher secondary schools	7,288	10,838	17,257	21,800
Number of multipurpose schools	—	255	2,115	2,446
Number of training schools	782	930	1,138	1,424
Number of training colleges	53	107	478	312
Number of arts, science and commerce colleges	542	772	1,081	1,400
Number of universities	27	32	46	58
Percentage of trained teachers :				
Primary schools	58.8	61.2	64.1	75.0
Middle schools	53.3	58.5	66.5	75.0
High/higher secondary schools	53.8	59.7	64.1	75.0

Literacy

The state of literacy in the country, according to the 1961 census, is shown in Table 27.

TABLE 27
LITERACY IN INDIA

State/Union Territory	LITERATES			PERCENTAGE OF LITERACY		
	Persons	Males	Females	Persons	Males	Females
INDIA	10,55,05,751	7,79,29,431	2,75,76,320	24.0	34.5	13.0
<i>States</i>						
Andhra Pradesh	76,26,527	54,82,333	21,44,194	21.2	30.2	12.0
Assam	32,48,055	23,61,724	8,86,331	27.4	37.3	16.0
Bihar	85,47,845	69,50,967	15,96,878	18.4	29.8	6.9
Gujarat	62,83,256	43,73,373	19,09,883	30.5	41.1	19.1
Jammu & Kashmir	3,92,761	3,21,827	70,934	11.0	17.0	4.3
Kerala	79,19,220	45,96,265	33,22,955	46.8	55.0	38.9
Madhya Pradesh	55,44,862	44,81,454	10,63,408	17.1	27.0	6.7
Madras	1,05,80,616	75,32,323	30,48,293	31.4	44.5	18.2
Maharashtra	1,17,93,070	85,88,657	32,04,413	29.8	42.0	16.8
Mysore	59,90,585	43,52,428	16,38,157	25.4	36.1	14.2
Nagaland	66,117	45,917	20,200	17.9	24.0	11.3
Orissa	38,01,245	30,42,004	9,59,241	21.7	34.7	8.6
Punjab	49,17,396	35,91,177	13,26,219	24.2	33.0	14.1
Rajasthan	30,65,568	25,04,983	5,60,585	15.2	23.7	5.8
Uttar Pradesh	1,30,13,183	1,05,46,795	24,66,388	17.6	27.3	7.0
West Bengal	1,02,25,664	74,54,006	27,71,658	29.3	40.1	17.0
<i>Union Territories and Other Areas</i>						
Andaman and Nicobar Islands	21,372	16,675	4,697	33.6	42.4	19.4
Delhi	14,02,298	9,04,801	4,97,497	52.7	60.8	42.5
Himachal Pradesh	2,31,664	1,91,139	40,525	17.1	27.2	6.2
Laccadive, Minicoy and Amindivi Islands	5,610	4,273	1,337	23.3	35.8	11.0
Tripura	2,31,188	1,75,060	56,128	20.2	29.6	10.2
Manipur	2,37,276	1,74,656	62,620	30.3	45.1	15.9
Dadra and Nagar Haveli	5,495	4,342	1,153	9.5	14.7	4.1
Goa, Daman & Diu	1,92,716	1,18,111	74,605	30.75	39.04	23.02
NEFA	24,013	21,757	2,256	7.1	12.3	1.5
Pondicherry	1,38,149	92,384	45,765	37.4	50.4	24.6
Sikkim	19,999	16,721	3,278	13.3	19.6	4.3

PRE-PRIMARY EDUCATION

The progress of pre-primary education is indicated below.

TABLE 28
PRE-PRIMARY EDUCATION

Year					Number of schools	Number of students on rolls*	Number of teachers	Direct expenditure (in lakhs of Rs.)
1950-51	..	..	..	..	303	21,640	866	11.98
1955-56	..	..	..	..	630	45,828	1,880	24.99
1960-61	..	..	..	..	1,909	1,21,122	4,007	58.73
1961-62**	..	..	..	..	2,256	1,45,073	4,901	74.85

PRIMARY EDUCATION

The All-India Council for Elementary Education advises the Central and State Governments on all matters relating to elementary education and preparation of programmes for the early implementation of compulsory and free education.

Legislation for compulsory primary education has been enacted in Andhra Pradesh, Assam, Gujarat, Madhya Pradesh, Mysore, Punjab, West Bengal and Delhi. Schemes have been drawn up for intensive enrolment in schools. Plans have also been drawn up to train 15 lakh teachers by 1966.

The progress of primary education is shown in the following table.

TABLE 29
PRIMARY EDUCATION***

Year					Number of schools	Number of students on rolls	Number of teachers	Direct expenditure (in crores of Rs.)
1950-51	..	..	..	..	2,09,671	1,82,93,967	5,37,918	36.49
1955-56	..	..	..	..	2,78,135	2,29,19,734	6,91,249	53.73
1960-61	..	..	..	..	3,30,397	2,66,42,253	7,41,695	73.44
1961-62**	..	..	..	..	3,51,799	2,93,44,795	7,95,324	82.42

SECONDARY EDUCATION†

The table below shows at a glance the position regarding the development and financing of secondary education.

TABLE 30
SECONDARY EDUCATION††

Year					Number of schools	Number of students on rolls	Number of teachers	Direct expenditure (in crores of Rs.)
1950-51	..	..	..	..	20,884	52,32,009	2,12,000	30.74
1955-56	..	..	..	..	32,568	85,26,509	3,38,188	53.02
1960-61	..	..	..	..	66,920	1,81,22,356	6,41,689	111.83
1961-62**	..	..	..	..	75,222	2,03,13,910	7,12,509	118.63

*Excludes pupils in institutions attached to primary and secondary schools.

**Provisional.

***Includes junior basic schools for which separate figures are available in Table 31.

†See 'INDIA 1962' for reforms carried out on the recommendations of Secondary Education Commission (1953).

††Includes senior basic and post-basic schools for which separate figures are available in Table 31.

The Central Board of Secondary Education has been set up for conducting a common all-India higher secondary examination. It will cater to the needs of children of Union Government employees and will make its services available to any secondary school in or outside India wishing to prepare candidates for its examination. Twenty central schools were set up during 1963-64.

To further the programme of examination reform, evaluation units are being set up in the States of Assam, Madhya Pradesh, Maharashtra, Mysore, Uttar Pradesh and West Bengal. The State Bureaux of Educational and Vocational Guidance are being strengthened in the States of Gujarat, Mysore, Orissa, Punjab, Rajasthan and Uttar Pradesh.

BASIC EDUCATION

Basic education is now the accepted pattern of the educational system at the elementary level. It has an activity-centred curriculum wherein the process of learning is correlated with the physical and social environment of the children. Education is imparted through socially useful productive activities like spinning and weaving, gardening, carpentry, leather work, book craft, domestic crafts, pottery, elementary engineering, etc. The emphasis at present is on introducing important features of basic education in non-basic schools, orientation programmes for officers and teachers to reduce differences between basic and non-basic education, development of an integrated syllabus for elementary schools and conversion of elementary teachers' training institutions to the basic type.

Post-basic schools have been started to enable pupils who have been educated in the junior and senior basic schools to continue their secondary education along the basic lines. To resolve difficulties faced by such students a common scheme of examination for both the types of schools and acceptance of crafts of post-basic schools as at par with the elective subjects of multipurpose schools has been evolved.

The progress of basic education is shown in Table 31.

TABLE 31
BASIC EDUCATION*

	1950-51	1955-56	1960-61	1961-62**
Number of schools :				
(i) Junior basic	33,379	42,971	65,891	73,907
(ii) Senior basic	351	4,842	14,321	16,247
(iii) Post-basic	—	19	31	31
Number of students :				
(i) Junior basic†	28,46,240	37,30,459	64,90,315	76,24,503
(ii) Senior basic	66,382	13,29,748	32,20,098	35,62,443
(iii) Post-basic	—	2,377	4,340	4,712
Number of teachers :				
(i) Junior basic	74,756	1,11,347	1,61,339	1,96,082
(ii) Senior basic	2,563	39,672	1,02,643	1,11,726
(iii) Post- basic	—	—	242	240
Direct expenditure :				
(Rs. in crores)				
(i) Junior basic	3.94	8	15.95	18.57
(ii) Senior basic	0.21	4.06	12.36	13.68
(iii) Post-basic	—	.04	0.04	0.05

*Figures shown here separately for basic education have already been included in primary and secondary education in Tables 29 and 30.

**Provisional.

†Inclusive of basic primary.

The National Institute of Basic Education, set up in 1956, is engaged in carrying out research and offering training and guidance to teachers and administrators of basic education. It also provides suitable material and literature for pupils and teachers.

The Institute is now a constituent unit of the National Council of Educational Research and Training.

The National Board of Basic Education, established in 1962, advises the Union Government on programmes and policies and reviews progress.

VOCATIONAL AND TECHNICAL SCHOOL EDUCATION*

The number of institutions, enrolment and teachers and expenditure on vocational and technical school education are shown below.

TABLE 32

VOCATIONAL AND TECHNICAL SCHOOL EDUCATION

Year	Number of institutions	Number of students on rolls	Number of teachers	Direct expenditure (in crores of Rs.)
1950-51	2,339	1,87,194	11,598	3.69
1955-56	3,074	2,62,465	16,597	5.45
1960-61	4,145	4,01,274	27,101	11.41
1961-62**	3,831	4,42,307	28,615	12.77

SPECIAL SCHOOL EDUCATION

Special education institutions include schools for the handicapped and for social workers; schools of music, dancing and other fine arts; schools of oriental studies, adult education, etc.

TABLE 33

SPECIAL SCHOOL EDUCATION

Year	Number of institutions	Number of students	Number of teachers	Direct expenditure (in crores of Rs.)
1950-51	52,813	14,04,443	16,686	2.33
1955-56	50,987	14,87,878	20,611	2.65
1960-61	67,084	16,89,651	31,741	3.19
1961-62**	—	—	34,193	3.48

HIGHER AND UNIVERSITY EDUCATION

Post-secondary education in India is imparted through arts and science colleges, professional colleges, special education colleges, research institutions and universities. In States having Boards of Higher Secondary and Intermediate Education, the post-intermediate education is conducted under the direction and control of universities in respect of courses of study, examinations and award of degrees and diplomas.

A forum for the discussion of university problems and for the mutual recognition of degrees and diplomas awarded by the universities in India is provided by the Inter-University Board founded in 1925. The functions of the Board are advisory in character.

Besides the universities, there are a large number of institutions which impart higher learning. The Indian Agricultural Research Institute, Delhi, the Indian Institute of Science, Bangalore, the Jamia Millia Islamia, New

*Vocational institutions include schools for agriculture, arts and crafts, commerce, engineering, forestry, industry, medicine, physical education, teachers' training, veterinary science, polytechnics and others.

**Provisional.

Delhi, the Indian School of International Studies, New Delhi, the Gurukul Kangri Vishwavidyalaya, Hardwar, the Kashi Vidyapith, Varanasi, and the Gujarat Vidyapith, Ahmedabad, have been deemed to be universities for the purposes of the University Grants Commission Act, 1956. Many of the research laboratories and institutions mentioned in the chapter on "Scientific Research" are recognised by the Inter-University Board as centres of higher research. Some of them undertake teaching as well. Besides these, there are certain national institutions, like Gurukul Vishwavidyalaya, Vrindavan, whose degrees and diplomas are recognised by the Government of India as equivalent to the corresponding degrees and diplomas of a university for purposes of employment.

In Table 34 is shown the State/Territory-wise distribution of various types of institutions in 1961-62 catering for higher education and in Table 35 is shown the growth of these institutions since 1950-51.

TABLE 34
STATE/TERRITORY-WISE DISTRIBUTION OF INSTITUTIONS OF
HIGHER EDUCATION (1961-62)

State/Union Territory	Universities	Boards of education	Research institutions	Arts and science colleges	Professional colleges	Special education colleges	Total
Andhra Pradesh ..	3	1	—	65	36	26	131
Assam	1	—	—	38	12	1	52
Bihar	5	1	4	112	34	7	163
Gujarat	3	1	8	56	45	9	122
Jammu & Kashmir ..	1	—	—	16	7	10	34
Kerala	1	—	—	47	35	7	90
Madhya Pradesh ..	4	1	—	80	110	37	232
Madras	2	1	—	59	162	20	244
Maharashtra	5	2	15	105	197	17	341
Mysore	2	—	3	58	102	7	172
Nagaland	—	—	—	2	—	—	2
Orissa	1	1	—	33	23	6	64
Punjab	2	—	—	97	48	5	152
Rajasthan	1	2	1	56	24	18	102
Uttar Pradesh	9	1	5	142	54	12	223
West Bengal	5	1	4	136	56	14	216
Delhi	2	1	4	23	12	3	45
Goa, Daman & Diu ..	—	—	—	—	1	2	3
Himachal Pradesh ..	—	—	—	6	1	2	9
Manipur	—	—	—	2	1	22	25
Pondicherry	—	—	—	3	3	—	6
Tripura	—	—	—	2	5	1	8
INDIA :	47	13	44	1,138	968	226	2,436

University Grants Commission

In pursuance of the recommendations of the University Education Commission appointed by the Government in 1948, the University Grants Commission was constituted in 1953. It was given an autonomous statutory status by an Act of Parliament in 1956. The University Grants Commission Act, 1956, requires the Commission to take such steps as it may think fit for the promotion and co-ordination of university education and for the determination and maintenance of standards of teaching, examination and research in universities. The Commission has the authority to make appropriate grants to different universities and implement development schemes.

The composition of the Commission as on March 1, 1964, was as follows :

Chairman	..	..	..	D. S. Kothari
Members	..	..	..	H. N. Kunzru, B. Shiva Rao, A. C. Joshi, D. C. Pavate, P. N. Kirpal, V. T. Dehejia, S. R. Das and A. R. Wadia.
Secretary	..	..	..	K. L. Joshi

TABLE 35
HIGHER EDUCATION

Year	Universities	Boards of education	Research institutions	Special education colleges	Professional & technical colleges	Arts & science colleges	Number of students on rolls	Number of teachers	Direct expenditure (in crores of Rs.)
1950-51	27	7	18	92	208	498	4,03,519	24,453	17.68
1955-56	32	11	34	112	346	712	6,81,179	37,865	29.71
1960-61	45	13	41	208	852	1,039	9,86,111	62,239	56.71
1961-62*	47	13	44	226	968	1,138	10,48,524	68,785	64.67

Table 37 shows the universities, their character, number of colleges, number of students and expenditure incurred on them.

HIGHER TECHNICAL EDUCATION**

The following table indicates the expansion of facilities for higher technical education (engineering and technology) during the period 1951 to 1963.

TABLE 36
HIGHER TECHNICAL EDUCATION

Year	Institutions		Sanctioned intake		Outturn	
	Degree Engg. & Tech.	Diploma Engg. & Tech.	Degree Engg. & Tech.	Diploma Engg. & Tech.	Degree Engg. & Tech.	Diploma Engg. & Tech.
1951	53	89	4,788	6,216	2,693	2,626
1956	71	109	6,612	10,318	4,337	4,103
1961	111	209	15,850	27,701	7,026	10,349
1962	117	232	17,328	30,886	8,426	12,046
1963*	117	250	21,020	39,000	9,113	12,750

To meet the requirements of technical personnel for the economic development of the country, the Third Plan provides for the establishment of 23 engineering colleges (including 8 regional colleges) and 91 polytechnics. Twelve of the colleges and 54 polytechnics have already started functioning. A College of Architecture has been established at Chandigarh and post-graduate facilities expanded in other colleges.

The Indian Institute of Technology, Kharagpur, the first in the chain of four higher technological institutes, started functioning in 1951. The Indian Institute of Technology, Bombay, and the Indian Institute of Technology, Madras, admitted the first batch of students in 1958 and 1959 respectively and the institute at Kanpur in 1960. Each institute when completed will provide for the education of over 1,600 students at the under-graduate level and 300 at the post-graduate level. A new College of Engineering and Technology was established in Delhi for under-graduate and post-graduate courses as well as research. Two Institutes of Management have also come into being at Calcutta and Ahmedabad.

A National Institute for Training in Industrial Engineering is being set up in Bombay in collaboration with the United Nations Special Fund. On completion the Institute will offer courses to 1,400 technicians a year.

*Provisional.

**For a list of engineering and technological institutions, see Appendices.

TABLE 37
UNIVERSITIES IN INDIA
(1963)

Name, location and year of establishment		Character	No. of colleges (1962-63)	No. of students (1961-62)	Expenditure (in crores of Rs.) (1961-62)
1	Agra University, Agra (1927)	Affiliating	122	51,044	3.29
2	Allgarh University, Allgarh (1921)	Residential and Teaching	1	5,010	0.99
3	Allahabad University, Allahabad (1887)	Residential and Teaching	6	8,694	0.85
4	Andhra University, Waltair (1926)	Affiliating and Teaching	56	28,214	2.52
5	Annamalai University, Annamalainagar (1929)	Residential and Teaching	—	2,975	0.50
6	Banaras Hindu University, Varanasi (1916)	Residential and Teaching	18	6,653	3.36
7	Baroda University, Baroda (1949)	Residential and Teaching	15	9,559	1.34
8	Burdwan University, Burdwan (1960)	Affiliating and Teaching	35	17,370	1.43
9	Bihar University, Bhagalpur (1960)	Affiliating and Teaching	35	18,890*	0.83*
10	Bihar University, Muzaffarpur (1952)	Affiliating and Teaching	39	28,922	1.42
11	Bombay University, Bombay (1857)	Federal and Teaching	46	50,692	3.20
12	Calcutta University, Calcutta (1857)	Affiliating and Teaching	128	1,15,936	6.44
13	Delhi University, Delhi (1922)	Affiliating and Teaching	31	18,939*	2.43*
14	Gauhati University, Gauhati (1948)	Affiliating and Teaching	43	33,437	2.31
15	Gorakhpur University, Gorakhpur (1957)	Affiliating and Teaching	29	14,068	0.69
16	Gujarat University, Ahmedabad (1949)	Affiliating and Teaching	80	39,833	2.47
17	Indira Kala Sangeet Vishwavidyalaya, Kharagpur (1956)	Affiliating and Teaching	30	—	—
18	Jabalpur University, Jabalpur (1957)	Affiliating and Teaching	21	9,554	0.85
19	Jadavpur University, Jadavpur (1955)	Affiliating and Teaching	2	3,251	0.61
20	Jammu and Kashmir University, Srinagar (1948)	Residential and Teaching	34	10,014	0.97
21	Jodhpur University, Jodhpur (1962)	Affiliating and Teaching	8	—	—
22	Kalyani University, Kalyani (West Bengal) (1960)	Residential and Teaching	4	339	0.14
23	Kameshwara Singh Darbhanga Sanskrit University, Darbhanga (1961)	Residential and Teaching	24	—	—
24	Karnatak University, Dharwar (1949)	Affiliating and Teaching	37	14,785	1.83
25	Kerala University, Trivandrum (1937)	Federal and Teaching	87	49,865	3.89
26	Kurukshetra University, Kurukshetra (1956)	Residential and Teaching	3	500	0.46
27	Lucknow University, Lucknow (1921)	Residential and Teaching	16	14,375	1.18
28	Madras University, Madras (1857)	Affiliating and Teaching	112	58,378	4.59
29	Magadh University, Bodhgaya (1962)	Affiliating and Teaching	30	—	—
30	Marathwada University, Aurangabad (1958)	Affiliating and Teaching	20	6,408	0.89

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31	Mysore University, Mysore (1916)	Affiliating and Teaching	64	36,507	3.57
32	Nagpur University, Nagpur (1923)	Affiliating and Teaching	53	27,330	2.03
33	North Bengal University, Siliguri (1963)	..	..	Affiliating and Teaching	16	—	—
34	Orissa University of Agriculture and Technology, Bhubaneswar (1962)	..	..	Residential and Teaching	2	—	—
35	Osmania University, Hyderabad (1918)	..	..	Affiliating and Teaching	40	21,665	2.83
36	Panjab Agricultural University, Ludhiana (1961)	..	..	Affiliating and Teaching	3	—	—
37	Panjab University, Chandigarh (1947)	..	..	Affiliating and Teaching	138	57,813	2.10
38	Patna University, Patna (1917)	..	..	Teaching	10	10,932*	0.89*
39	Poona University, Poona (1949)	..	..	Affiliating and Teaching	60	31,767	2.77
40	Punjab University, Patiala (1962)	..	..	Unitary and Teaching	..	—	—
41	Rabindra Bharati, Calcutta (1961)	..	..	Affiliating and Teaching	9	—	—
42	Rajasthan Agricultural University, Udaipur (1962)	..	..	Residential and Teaching	3	—	—
43	Rajasthan University, Jaipur (1947)	..	..	Affiliating and Teaching	69	30,960	3.18
44	Ranchi University, Ranchi (1960)	..	..	Affiliating and Teaching	26	14,219*	1.19*
45	Roorkee University, Roorkee (1949)	..	..	Residential and Teaching	..	1,832	0.87
46	Sardar Vallabhbhai Vidyapeeth, Vallabh Nagar, Anand (1955)	..	..	Affiliating and Teaching	8	4,740	0.72
47	Saugar University, Sagar (1946)	..	..	Affiliating and Teaching	70	13,864*	1.32*
48	Shivaji University, Kolhapur (1962)	..	..	Affiliating and Teaching	..	—	—
49	S.N.D.T. Women's University, Bombay (1951)	..	..	Affiliating and Teaching	13	3,147	0.28
50	Shri Venkateswara University, Tirupati (1954)	..	..	Affiliating and Teaching	25	8,950	1.21
51	Utkal University, Cuttack (1943)	..	..	Affiliating and Teaching	45	13,425*	1.48*
52	U.P. Agricultural University, Pantnagar, Nainital Distt. (1960)	..	..	Residential and Teaching	3	415	0.56
53	Varanaseya Sanskrit Vishwavidyalaya, Varanasi (1958)*	..	..	Affiliating and Teaching	75	—	—
54	Vikram University, Ujjain (1957)	..	..	Affiliating and Teaching	58	20,906	2.24
55	Visva Bharati University, Santiniketan (1951)	..	..	Residential and Teaching	7	489	0.51

*Information relates to 1960-61.

RURAL HIGHER EDUCATION

On the recommendation of the Rural Higher Education Committee a National Council for Higher Education in Rural Areas was established in 1956 to advise the Government on all matters relating to the development of rural higher education. The Council have selected 14 institutions for development into rural institutes and these have started functioning at Sriniketan (W. Bengal), Gandhigram (Madras), Jamianagar (Delhi), Udai-pur (Rajasthan), Birouli (Bihar), Bichpuri (U.P.), Sanosara (Gujarat), Coimbatore (Madras), Gargoti (Maharashtra), Amravati (Maharashtra), Rajpura (Punjab), Wardha (Maharashtra), Hanumanamathi (Mysore), Thavanoor (Kerala), and Indore (Madhya Pradesh). Recognition of the diploma in rural sciences as equivalent to a first degree of a university for purposes of employment has been secured. It is also recognised by the Inter-University Board and certain universities for post-graduate studies in specified subjects. The diploma course in civil and rural engineering has been recognised by the All-India Council of Technical Education and some State Governments for appointment to subordinate services and posts. The two-year certificate course in agricultural science and the sanitary inspectors' course have been recognised by most of the State Governments.

A concurrent course of general education and teachers training of three years' duration after the higher secondary stage has been introduced as a pilot project at the Rural Institute at Gargoti.

SOCIAL EDUCATION

Social education provides an educational base for community development programmes in the country and includes literacy, use of libraries, education in citizenship, cultural and recreational activities, utilisation of audio-visual aids and organisation of youth and women's groups for community development. Most of the work is done in the development blocks, the Centre providing certain ancillary services such as the production of literature, research and training.

A National Centre for Fundamental Education has been established in New Delhi to train higher grade personnel for social education work, develop suitable techniques, carry out research on selected problems and serve as a clearing house of information. The Library Institute set up at the Delhi University performs similar functions in the field of libraries. The Government of India also run the Delhi Public Library as a pilot public library project. A Social Education Institute for Workers has also been set up at Indore; janata colleges and vidyapiths are providing continuous educational facilities for adults in rural areas.

EDUCATION OF THE HANDICAPPED

A National Advisory Council advises the Government on all problems concerning education, training and employment of the physically and mentally handicapped. The National Centre for the Blind at Dehra Dun provides an integrated service for the blind. A national library is being built up at the centre largely with literature produced by its own press. This library caters to the needs of the blind throughout the country.

A training centre for the adult deaf has been established at Hyderabad. Special employment exchanges for the handicapped located in Bombay, Delhi, Hyderabad and Madras help to place the handicapped in suitable occupations.

A model school for blind children established in January 1959, at Dehra Dun, provides education up to VIII class. Eventually it will be a full-fledged secondary school. A training centre for the teachers of the blind was set up in Bombay in July 1963.

RESEARCH AND TRAINING

The National Council of Educational Research and Training, established in 1961, is charged with the function of (i) undertaking, aiding and promoting research in all branches of education; (ii) organising advanced pre-service and in-service training and disseminating improved techniques and practices; (iii) organising extension service for institutions engaged in educational research and training of teachers, and (iv) developing and improving multi-purpose secondary education.

The Governing Body of the Council is assisted by the Board of Educational Studies, the Central Committee on Educational Literature and Committees on Appointments, Finance and Works. The Board functioning through three standing sub-committees, examines all proposals relating to research, training and extension projects referred to it and initiates, guides and co-ordinates research and training activities of the Council. The Committee on Educational Literature supervises the Council's programme of producing text books and other educational literature. Two regular series of publications the Council brings out are the *Year Book on Education*, and *Educational Studies and Investigations*. The School Defence Corps, which the Council has established, links up extra-curricular activities in the schools with the need of preparing the youth for national defence.

The research and teachers' training programmes of the Council are developed through the National Institute of Education at New Delhi and four regional colleges of education at Ajmer, Bhubaneswar, Bhopal and Mysore. The college at Bhopal is yet to start functioning. The Institute's programme is at present being implemented by its constituent units—the National Institute of Audio-Visual Education, the National Institute of Basic Education, the Directorate of Extension Programmes for Secondary Education, the Central Institute of Education, the National Fundamental Education Centre, the Central Bureau of Educational and Vocational Guidance, the Department of Science Education and the Central Bureau of Text Book Research.

DEVELOPMENT OF HINDI

The programme for the propagation, development and enrichment of Hindi, the official language of the Union, comprises various schemes. Important among them now in progress are :

(i) Evolution, review, co-ordination and finalisation of Hindi terminology other than legal. (ii) Standardisation of keyboard for Hindi typewriters and teleprinters. (iii) Evolving a standard system of Hindi shorthand. (iv) Organisation of Hindi teachers' training colleges on a zonal basis in the non-Hindi-speaking areas. (v) Compilation of the Hindi encyclopaedia in ten volumes by the Nagari Pracharini Sabha, the first three volumes of which have been released; the fourth volume is nearing completion. (vi) Preparation of standard manuals in various subjects. (vii) Preparation of terminological indices of 14 standard Hindi works and publication of omnibus volumes of works of 16 eminent writers. (viii) Preparation of bi-lingual and multi-lingual dictionaries. (ix) Preparation of bi-lingual alphabet charts in Hindi and other regional languages. (x) Translation of standard works in foreign languages into Hindi. (xi) Finalisation of the form of Devanagari script. (xii) Collection and indexing of special vocabulary of arts and crafts. (xiii) Evolution of symbols in Devanagari script for sounds in other regional languages. (xiv) Translation and publication of standard works on scientific and technical subjects. (xv) Establishment of the Central Hindi Directorate and its regional offices for propagation and development of Hindi. (xvi) Establishment of a standing commission for scientific and technical terminology. (xvii) Publication of

a quarterly journal—'Bhasa'—dealing with scientific and technical terminology. Four issues of the journal have been published so far.

YOUTH WELFARE

The highlights of the endeavour in the field of youth welfare have been as follows :

(i) Organisation of annual inter-university youth festivals and assistance to universities for the organisation of inter-collegiate festivals. (ii) Travel concessions and financial assistance for organising youth tours to places of historical, scenic and cultural interest and to development project areas. (iii) Assistance to the Youth Hostels Association of India and State Governments for setting up youth hostels all over the country. (iv) Assistance to universities in the promotion of youth welfare boards and committees for the successful implementation and co-ordination of youth welfare activities. (v) Organising labour and social service camps to inculcate a sense of dignity in manual labour in students and to bring them into contact with villages. (vi) Campus Work Projects Scheme to provide amenities such as gymnasias, swimming pools, open air theatres, recreation halls-cum-auditoria, etc., to universities and other educational institutions.

The 8th Inter-university Youth Festival was held in New Delhi between 11th and 18th November 1963. Thirty-six universities with 645 students participated in the festival.

PHYSICAL EDUCATION AND SPORTS

Physical Education

A national plan of physical education and recreation has been prepared for the promotion of physical education and recreation. The plan aims at popularising a model syllabus of physical education for boys and girls, promoting research in special aspects of physical education including *yoga*, granting assistance to *Vyayamshalas* and *Akhadas*, holding physical efficiency weeks and festivals and producing documentary and feature films on physical education.

The first national college of physical education, named after Rani Lakshmi Bai of Jhansi, was set up at Gwalior in 1957. The college offers training facilities for a three-year degree course in physical education. It has produced so far 100 graduates of physical education. Since 1963, the college has started a two-year Master's Degree course in physical education.

The Central Advisory Board of Physical Education and Recreation set up in 1950 advises Government on co-ordination of programmes and activities.

On the declaration of the national emergency the Government took measures to toughen the youth. National Cadet Corps and rifles training has been extended to cover all able-bodied college and university students. Emergency schemes of physical education and national discipline were formulated to prepare youths in schools.

Sports

Encouragement offered to the organisation of sports has been in the following directions :

- (i) Rendering assistance to the national sports organisations (one for each game), on the advice of the All-India Council of Sports, for the purchase of sports equipment, sending Indian teams abroad, inviting foreign teams to play in India, holding national championships, etc.

- (ii) Setting up of Sports Councils in the States and Union Territories.
- (iii) Rendering assistance to State Governments and national sports organisations for the construction of utility stadia.

A National Institute of Sports has been established at Patiala. It trains first class coaches in all games under the guidance of foreign experts. It lays special emphasis on popularising sports and games in educational institutions and in rural areas, besides the continuation of the existing schemes for the promotion of sports and games. The Institute has initiated a scheme of regional training centres.

The All-India Council of Sports advises the Government of India and the Sports Federations in the matter of development of games and sports in the country.

National Discipline Scheme

In order to bring up the younger generation under a proper code of discipline and to instil in them ideals of good citizenship and comradeship, a scheme for the physical and general social training of displaced children was introduced in July 1954. The scheme has since been extended to other educational institutions.

CHAPTER VI

CULTURAL ACTIVITIES

Promotion of art and culture and inculcation of art consciousness among the people are sought to be achieved through the agency of the Lalit Kala Akademi (Academy of Art), Sangeet Natak Akademi (Academy of Dance, Drama and Music) and Sahitya Akademi (Academy of Letters). Some of the facilities for mass communication at the disposal of the State have also been utilised to make the people conscious of their cultural heritage. A number of institutions have collaborated in the task of popularising traditional arts and crafts.

ART

Lalit Kala Akademi

The Lalit Kala Akademi, set up in 1954, promotes the development of fine arts and evolves a programme of work for the growth and nourishment of painting, sculpture and other graphic arts. It also co-ordinates the activities of the regional or State akademis, encourages exchange of ideas among various schools of art, publishes literature and fosters inter-regional and international contacts through exhibitions, exchange of personnel and of art objects.

The Akademi holds a National Exhibition of Art every year at New Delhi, which also visits different State capitals by rotation. Exhibitions of the arts and crafts of Eastern and Western countries in India and of Indian arts and crafts abroad are also organised by the Akademi. Seminars devoted to various aspects of art are also held periodically. The Akademi makes annual awards to outstanding artists participating in the National Exhibition of Art.*

Among the art publications brought out by the Akademi are *Mughal Miniatures*, *Portfolio of Contemporary Painting*, *Krishna Legend in Pahari Painting*, *Ajanta Painting*, *Mewar Painting*, *Kishangarh Painting*, *Birbhum Terracottas*, *Bundi Painting*, *Paintings of the Sultans and Emperors in American Collections*, *Miniature Painting*, and picture postcards of *Indian Miniatures*. Booklets on 'Bendre', 'Ravi Varma', 'Hebbar', 'Chavda', 'Halder', 'Paniker', 'Husain', 'Ram Kinkar' and 'P. Das Gupta' have also been published in the Lalit Kala series on Contemporary Indian Art. The Akademi brings out two bi-annual art journals *Lalit Kala (Ancient)* and *Lalit Kala (Contemporary)*. *South Indian Bronzes* came out as a publication in the Lalit Kala (Ancient) series during the year.

The Publications Division of the Ministry of Information and Broadcasting has also brought out a number of important art publications. These include *Indian Art Through the Ages*, *Architecture and Sculpture of India*, *The Way of the Buddha*, *Kangra Valley Painting* and *Basohli Painting*.

The Akademi honours its Fellows with *Tamrapatra* (a copper plate), *Angavastra* (silk brocade) and Rs. 5,000 as a token of respect for their outstanding contribution in the field of art. The 1963 honours went to Prof. O. C. Ganguly of Calcutta and Rai Krishnadas of Banaras.

Grants-in-Aid totalling Rs. 68,500 were granted to eleven recognised institutions and six State Akademis.

National Gallery of Modern Art

The National Gallery of Modern Art, established in 1954, possesses about 3,000 art objects representing trends in art for the last hundred years.

*For a list of 1964 awards, see Appendices.

Among the distinguished artists whose works are represented at the Gallery are Rabindranath Tagore, Nandalal Bose, Abanindranath Tagore, Jamini Roy, D. P. Roy Chaudhury, Amrita Sher Gill, Sudhir Khastagir and many other modern painters and sculptors.

DANCE, DRAMA AND MUSIC

Sangeet Natak Akademi

The Sangeet Natak Akademi, inaugurated in 1953 and registered as a Society in 1961, directs its activities to the fostering of dance, drama and music. It promotes research, encourages setting up of theatre centres and training institutions, organises seminars and festivals, awards prizes, and fosters cultural exchange. It is also organising libraries of records, books and films relating to the fields of its activity.

The Akademi maintains close liaison with the institutions it has recognised and with affiliated regional akademis now functioning in Andhra Pradesh, Assam, Gujarat, Jammu and Kashmir, Kerala, Madhya Pradesh, Madras, Mysore, Orissa, Punjab, Rajasthan and Uttar Pradesh. These regional akademis are collaborating with the national organisation in surveying the various art forms in the country. Drama competitions are organised by the Akademi to encourage dramatic activity in general and the writing and production of new plays in particular.

There are two training institutions being run by the Akademi—the National School of Drama and Asian Theatre Institute at New Delhi and the Manipur Dance College at Imphal.

Grants totalling Rs. 5,12,625 were sanctioned to various institutions and State Akademis, etc.

The Akademi makes annual awards to outstanding artists in the field of dance, drama and music.*

Radio Drama

The National Programme of Plays, broadcast simultaneously from different stations of All India Radio in the languages of the regions, makes available to listeners all over India some of the best known plays in Indian dramatic literature of the past 75 years. Ninety-two such plays have so far been broadcast.

Radio Sangeet Sammelan

This regular annual musical event of All India Radio aims at stimulating appreciation of the principal forms of classical music and presenting a variety of *ragas* and *raginis* by exponents of Hindustani and Karnatak music. *Sugam Sangeet* or light music sessions are held in continuation of the classical music sessions. An annual music competition confined to young artists (which precedes the *Sammelan*) aims at discovering new talent. Group music competitions have become a feature of the *Sammelan*. Symposia to discuss the development of music and possibilities of giving it a new direction are also held.

National Programme of Music

Started in 1952, this AIR programme featuring eminent artists aims at fostering a better mutual appreciation between the two systems of music—Hindustani and Karnatak. Regional and folk music, operas, as well as patriotic songs are also broadcast periodically.

Special Programmes

During 1963, AIR organised special programmes to commemorate the 150th birth anniversary of Swathi Thirunal, the tri-centenary of Kshetragnya and the fourth centenary of Purandardasa.

*For a list of 1962-63 awards, see Appendices.

National Programme of Operas

This programme, broadcast from Delhi and relayed by all stations of AIR once every two months, makes available to listeners some of the best known traditional and modern operas and musical tunes in different regions of the country. The operas broadcast during 1963 centered round heroes and heroic themes.

Vadya Vrinda

The AIR *Vadya Vrinda* (National Orchestra), set up in 1952, has built up a sizeable repertoire of compositions based on traditional *ragas* and folk tunes. It has also attempted thematic compositions.

Other AIR Programmes

Classical music recitals of short duration (*Subaddha Sangeet*) are also broadcast. *Vrindagan* (choral music), *Sugam Sangeet* (modern light music based on classical and folk melodies), folk and devotional music and Western music broadcast from Bombay, Madras, Calcutta and Delhi are among other forms of musical programmes of All India Radio aimed at the fostering of music in the country.

LITERATURE

Sahitya Akademi

The Sahitya Akademi, inaugurated in 1954, is "a national organisation to work actively for the development of Indian letters and to set high literary standards, to foster and co-ordinate literary activities in all the Indian languages and to promote through them all the cultural unity of the country".

The publication of a *Bibliography of Indian Literature* (20th Century), covering all books of literary merit published in the twentieth century in the fourteen major languages specified in the Constitution, as well as books in English published in India or written by Indian authors, is one of the important activities of the Akademi. The first volume of the bibliography relating to Assamese, Bengali, Gujarati and English has already been released and the second volume covering Hindi, Kannada, Kashmiri and Malayalam is in press. A comprehensive "Who's Who of Indian Writers" was published by the Akademi in 1961.

Among other nearly 300 publications of the Akademi already released are a critical edition of Kalidasa's *Meghaduta*, *Vikramorvasiya* and *Kumarsambhava*, histories of Malayalam, Bengali, Oriya and Kannada literature, two volumes of an *Anthology of Sanskrit Literature*, a critical edition of the ancient Sanskrit work *Asokavadana*, anthologies of Punjabi, Kashmiri, Malayalam, Tamil, Telugu, Urdu and Assamese poetry, Vaishnava lyrics of Assam and Bengal, one-act plays in Gujarati and Kannada, short stories in Gujarati, Kannada, Marathi, Sindhi, Tamil and Telugu, essays in Gujarati and Kannada, selections of Bharati's poems in Tamil, of Rajwade's and Agarkar's prose in Marathi, selections from Nihalal in Gujarati, selections from Bharatchandra, Kshemanand and Chaitanya in Bengali and Shah Abdul Latif, Sami, Sachal and Diwan Kauromal's prose in Sindhi, a *Symposium on Contemporary Indian Literature*, an *Anthology of Contemporary Indian Short Stories* and a *Russian-Hindi dictionary*. Publications ready for press or in preparation include critical editions of Kalidasa's *Sakuntala*, *Malavikagnitimitra* and *Raghuvamsa*, histories of Assamese, Kannada and Telugu literatures, three volumes of an *Anthology of Sanskrit Literature* and a Tibetan-Hindi dictionary. Publication of Contemporary Hindi Literature (1947-60) giving developments in Hindi literature since independence has been arranged by the Akademi.

Bharatiya Kavita—1953, an anthology of poems selected from each of the fourteen languages along with their Hindi translations, has been published. The second volume covering the year 1954-55 has also been published and the third covering 1956-57 is in the press. Hindi translation of a selection of Vallathol's poems in Malayalam and translations in Kannada, Malayalam and Telugu and selections from Bharati's poems in Tamil have been published.

The Akademi has undertaken the publication of the collected works of Maulana Abul Kalam Azad in Urdu and the poetical writings of Sardar Pooran Singh in Punjabi.

A number of Indian and foreign classics have been translated and published in several Indian languages. The first two of eight volumes of Rabindranath Tagore's works (original in Bengali and Devanagari script) covering 101 poems and 500 songs entitled *Ekottarasati* and *Gita-Panchasati* have been published. Gujarati, Punjabi, Marathi and Oriya editions of *Ekvinsati* (21 short stories) have also been released. The Tagore centenary volume with contributions by distinguished writers from all over the world was published at the time of the International Literary Seminar. Translations of Romain Rolland's *The Life of Vivekananda* in some Indian languages were undertaken in connection with his birth centenary in 1963 and the Urdu version of it has already been published.

The Akademi brought out a total of 58 publications during 1963-64 in different Indian languages under its various programmes.

The Akademi publishes two half-yearly journals, one in English called *Indian Literature* and the other in Sanskrit called *Sanskrita Pratibha*. A monthly bulletin is also being issued since January 1964.

The Akademi makes annual awards to authors of outstanding books published in Indian languages.*

Gandhian Literature

Early in 1956, a scheme was launched by the Ministry of Information and Broadcasting to publish a complete collection of Mahatma Gandhi's writings, speeches and letters in chronological order in a series of volumes. The first ten volumes covering the period 1884 to 1911 have been released.

Literary Broadcasts

The National Symposium of Poets, first organised in 1956 by AIR, is now a regular annual feature in which leading poets of the country participate.

An all-India gathering of writers representing different branches of creative writing was first convened in 1956 and has become an annual feature. The theme of the *Samaroh* in 1963 was "Patriotism in the Literature of various Indian Languages".

The National Programme of Contemporary Literature, inaugurated in 1960, brings to listeners all over the country a selection of the creative and critical writing being produced in the regional languages of India. Broadcast on the last Thursday of every quarter, the programme covers short stories, skits, poems and other literary creations broadcast from various stations by well-known writers and literateurs in the regional languages.

The Patel Memorial Lectures, delivered annually since 1955 by eminent persons and presenting in a popular manner the results of their study and experience, aim at contributing to the existing knowledge in a given subject and promoting awareness of contemporary problems. The Lad Memorial Lectures, instituted in 1958, are delivered in Marathi from the radio stations serving the Marathi-speaking region.

*For a list of 1963 awards, see Appendices.

National Book Trust

The National Book Trust was set up in 1957 to encourage the production of good literature and to make such works available at moderate prices to libraries, educational institutions and the public. Ninety-three such publications including one reprint have so far been released.

The Trust also publishes standard works on education, science, culture and the humanities. Classical Indian literature, the translation of foreign classics and the translation of Indian classics from one regional language into another receive special attention. Universities and other learned bodies can seek the assistance of the Trust for the publication of approved books.

PROMOTION OF INTER-STATE CULTURAL UNDERSTANDING

Exchange of Cultural Troupes

Under the Inter-State Exchange of Cultural Troupes, introduced in 1959-60, troupes are sent to other States.

Exchange of Artists

Exchange of eminent artists is being organised to promote understanding of the music and dance forms of the different regions of India.

Open Air Theatres

Open air theatres are being established in rural areas to provide facilities to the people to stage drama, dance and other cultural activities. Since the introduction of the scheme 138 theatres have been sanctioned in various States.

Assistance to Theatre Groups

Theatre groups, registered under the Registration of Societies Act, 1860, and which have produced at least three separate dramas during the previous five years and staged not less than 50 shows during the previous year, are provided grants under a scheme launched in 1960-61 to encourage the theatre in the country. Such theatre groups are also eligible to receive financial assistance to enable them to send five persons to visit theatre groups at other places to study the techniques adopted by them.

Another scheme is in operation to offer assistance to professional theatres by way of meeting the deficit of the theatre groups on a matching basis by the Government of India and the State Governments. Initially such assistance has been limited to one theatre group in each State. So far, one theatre group in each of the States of Andhra Pradesh, Assam, Gujarat, Kerala, Madras, Orissa and West Bengal has been approved for assistance.

Grants to Cultural Organisations

Registered cultural organisations are provided grants for building purposes.

CULTURAL RELATIONS WITH OTHER COUNTRIES

External Relations Division

An External Relations Division has been established in the Ministry of Education (Department of Education) to promote better understanding and goodwill by means of exchange of delegations of artists, students, scholars, publications, exhibitions and art objects with other countries, as also through presentation of books, selection of Indian teachers for service abroad, participation in international congresses and conferences, cultural agreements, construction and maintenance of international students' houses and hostels, creation of chairs of Indology abroad and assistance for the publication of foreign translations of Indian classics.

Exhibitions

Exhibitions of Indian art and culture are periodically organised abroad. Similar exhibitions reflecting the art and culture of other countries are held in India.

Cultural Agreements

Cultural agreements have been entered into with Afghanistan, Bulgaria, Greece, Hungary, Japan, Indonesia, Rumania, Poland, Turkey, Iraq, Norway, United Arab Republic, Iran, Czechoslovakia, USSR, Yugoslavia and Mongolia.

Grants

Financial assistance in the form of grants-in-aid has been given to more than 20 societies and institutions in India and abroad engaged in fostering closer cultural relations between India and other countries. Financial assistance has been given to the proposed India House at the Cite Universitaire, Paris.

Indian Council for Cultural Relations

The Indian Council for Cultural Relations was established in November 1949, with the object of establishing, reviving and strengthening cultural relations between India and other countries. Although financed entirely by the Government of India, the Council functions as an autonomous body.

Amongst the many activities of the ICCR, the following may be mentioned: arranging orientation courses, summer camps, excursion tours and social get-togethers for the benefit of foreign students in India; exchange of visits of eminent scholars, savants and students; maintenance of chairs of Indology in foreign universities outside India; appointment abroad of lecturers in Indian culture; presentation of books and films about India; welfare of foreign students in India; reception and entertainment of distinguished foreigners in India; organising lectures by eminent scholars; exhibition of paintings and photographs and award of travel grants and scholarships to Indian and foreign students.

The Council publishes two quarterly journals, namely, *Indo-Asian Culture* in English and *Thaqafat-ul-Hind* in Arabic. Besides, it subsidises a journal in Persian and English entitled *Indo-Iranica*. The Council also sponsors the publication of rare manuscripts and valuable books on India. It undertakes publication of books and brochures relating to different aspects of India's culture and translation of Indian publications into foreign languages.

Archaeological Survey of India

The Archaeological Survey of India is engaged in the exploration and excavation of ancient sites, maintenance and preservation of ancient monuments declared to be of national importance by law, study of epigraphs and coins, exhibition and preservation of ancient relics in site museums, and preparation and publication of multiform records, reports and reviews. It has ten Circles spread all over the country and separate specialised branches dealing with excavation, pre-history, epigraphs, chemical preservation, gardens and museums. The Survey celebrated its centenary in 1961. During 1963 the Survey excavated afresh or continued excavations at several ancient sites, the most important among them being Dharanikota in Andhra Pradesh, Rajgir in Bihar, Burzahom in Kashmir, Kaveripattinam and Gudiya in Madras and Kalibangan in Rajasthan.

CHAPTER VII

SCIENTIFIC RESEARCH

The policy of the Government of India with regard to science and scientific research was formulated in a resolution of March 4, 1958, and laid as a statement on the table of both Houses of Parliament on March 31, 1958.

The aims of this policy are :

- (i) to foster, promote, and sustain, by all appropriate means, the cultivation of science and scientific research in all its aspects—pure, applied, and educational;
- (ii) to ensure an adequate supply, within the country, of research scientists of the highest quality, and to recognise their work as an important component of the strength of the nation;
- (iii) to encourage and initiate, with all possible speed, programmes for the training of scientific and technical personnel, on a scale adequate to fulfil the country's needs in science and education, agriculture and industry, and defence;
- (iv) to ensure that the creative talent of men and women is encouraged and finds full scope in scientific activity;
- (v) to encourage individual initiative for the acquisition and dissemination of knowledge, and for the discovery of new knowledge, in an atmosphere of academic freedom; and
- (vi) in general, to secure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Scientific research under State auspices in India is carried out mainly through the Council of Scientific and Industrial Research and the various national laboratories or research institutes set up under its control and in universities and research institutes aided by the Council. The Council grants fellowships to qualified persons who wish to pursue science as a career and disseminates scientific knowledge and information. It has also the responsibility of administering the "Pool for temporary placement of well-qualified Indian scientists and technologists returning from abroad." It maintains a National Register of Scientific and Technical Personnel in the country.

National Laboratories

The national laboratories and institutes set up by the Council at various centres in the country and the functions entrusted to them are shown in the following table.

TABLE 38
NATIONAL LABORATORIES/INSTITUTES

<i>Name of Laboratory/Institute</i>	<i>Location</i>	<i>Functions</i>
1. National Chemical Laboratory	Poona	Fundamental and applied research covering the whole field of chemistry for which other specialised institutes have not been set up. The National Collection of Type Cultures is housed in the Laboratory.

TABLE 38 (contd.)

<i>Name of Laboratory/Institute</i>	<i>Location</i>	<i>Functions</i>
2. National Physical Laboratory	New Delhi	Research in problems relating to physics, both fundamental and applied. Maintenance of Standards. Testing facilities are also available.
3. Central Fuel Research Institute	Jealgora (Bihar)	Fundamental and applied research on fuels—solid, liquid and gaseous. Physical and chemical surveys of Indian coals are conducted through seven coal survey stations under the Institute.
4. Central Glass and Ceramic Research Institute	Jadavpur	Research on different aspects of glass and ceramics, pottery, porcelain, refractories and enamels; development of processes for manufacture of glass and ceramic articles; standardisation of raw materials used in the ceramic industry.
5. Central Food Technological Research Institute	Mysore	Food processing and conservation of food, food engineering and all aspects of fruit technology. Regional fruit and vegetable preservation stations at Trichur, Nagpur, Bombay and Lucknow have been established.
6. National Metallurgical Laboratory	Jamshedpur	Fundamental and applied metallurgical research.
7. Central Drug Research Institute	Lucknow	All aspects of drug research including evaluation and standardisation of crude drugs, discovery of substitutes for pharmacopoeial drugs and plants, pharmaceutical and synthetic chemicals, biochemistry and biophysics, infection, immunisation, pharmacology, chemotherapy and experimental medicine.
8. Central Road Research Institute	New Delhi	Research on road materials, testing of road materials and road surfaces.
9. Central Electro-Chemical Research Institute	Karaikudi (Madras)	Research on different aspects of electro-chemistry, including electro-metallurgy, electro-deposition and allied problems.
10. Central Leather Research Institute	Madras	Fundamental and applied aspects of leather technology.
11. Central Building Research Institute	Roorkee	Engineering and structural aspects of building and human comforts in relation to buildings.
12. Central Electronics Engineering Research Institute	Pilani (Rajasthan)	Design and construction of electronic equipment and components and test equipment.
13. National Botanical Gardens	Lucknow	Collection and large-scale cultivation of economic and medicinal plants of industrial importance.
14. Central Salt and Marine Chemicals Research Institute	Bhavnagar	Investigation of production of pure salts; reduction in cost of production; economic utilisation of by-products of salt manufacture; development of new methods and techniques for the recovery, production and utilisation of marine and allied chemicals.

TABLE 38 (concl'd.)

<i>Name of Laboratory/Institute</i>	<i>Location</i>	<i>Functions</i>
15. Central Mining Research Station	Dhanbad	Research in methods of mining, safety in mines and mine machinery.
16. Regional Research Laboratory	Hyderabad	Research in problems relating to the industries and raw materials of the region.
17. Indian Institute for Bio-chemistry and Experimental Medicine	Calcutta	Research in various aspects of bio-chemistry as applied to medicine, bacteriology, etc.
18. Birla Industrial and Technological Museum	Calcutta	A museum to depict scientific and technological advancement.
19. Regional Research Laboratory	Jammu-Tawai (Jammu & Kashmir)	Research in problems relating to the industries and raw materials of the region and research specially directed to medicinal plants of the Himalayas (Kashmir Region).
20. Central Mechanical Engineering Research Institute	Durgapur (W. Bengal)	Research in mechanical engineering in all its aspects.
21. Central Public Health Engineering Research Institute	Nagpur	Research in all aspects of public health engineering and co-ordination of work of all interested agencies in this field in the country. Field centres and units of the Institute are functioning at various places in the country.
22. National Aeronautical Laboratory	Bangalore	Scientific investigation of the problems of flight with a view to their practical application to the design, construction and operation of aircraft in India.
23. Regional Research Laboratory	Jorhat	Research in problems relating to more efficient utilisation and better conservation of important national resources of Assam and other regional needs posing special problems.
24. Central Indian Medicinal Plants Organisation	Lucknow	Co-ordination of activities in the development of cultivation and utilisation of medicinal plants on organised basis.
25. Central Scientific Instruments Organisation	Chandigarh	Promotion and development of indigenous manufacture of scientific instruments for teaching, research and industry.
26. Indian Institute of Petroleum	Dehra Dun	Research in petroleum refining and processing of natural gas, petrochemicals, etc., and providing facilities for the training of personnel for petroleum industry.
27. National Geophysical Research Institute	Hyderabad	Correlation of the field data in all fundamental aspects of geology and geophysics with laboratory investigations and theoretical studies.
28. Visvesvaraya Industrial and Technological Museum	Bangalore	A museum to depict scientific and technological advancement.

The Council has also set up a Rain and Cloud Research Unit, a Central Design and Engineering Unit, a Scientific Survey and Planning Unit, a Defence Co-ordination Unit and an Indian National Scientific Documentation Centre, at New Delhi. It has also taken over the work of the Indian National Committee on Oceanic Research.

Sponsored Research

Through a liberal system of grants-in-aid, scientists in other technical institutes, industrial laboratories and universities are enabled to pursue fundamental and applied research and develop their own special fields. There are, at present, more than 600 such schemes in progress. Apart from the practical results achieved, the schemes provide opportunities of training for young research workers and develop centres of independent research work. Junior and senior fellowships are also being awarded to talented young persons, besides financial aid to retired scientists.

Co-operative Research Associations

Co-operative research associations in different industrial fields are being assisted in their capital and recurring expenditure and by way of technical advice, preparation of plans and procurement of expertise and materials. Ten such associations now functioning are catering to the textile, rubber, silk, art silk, paint, plywood, cement, wool and tea industries. Similar associations are in the process of being formed for the foundry, automobile, radio and electronics industries.

Liaison and Extension Services

Liaison units have been set up in most of the laboratories to maintain contact with the industry, trade associations and users of research. An Industrial Liaison and Extension Service Unit is maintained at New Delhi to make use of the available scientific knowledge for the economic betterment of rural and semi-urban communities. Extension wings of the national laboratories arrange practical demonstration of the processes for the benefit of the industry. A short-term training in the know-how of the processes is also imparted to the representatives of the industry.

Vigyan Mandirs

Forty-nine centres known as 'Vigyan Mandirs' have been set up generally at sites covered by Community Development projects. Equipped with a laboratory each and manned by suitably qualified and trained personnel, these centres disseminate scientific knowledge among the rural populace and educate them in the potentialities of the methods of science as applied to their day-to-day life. Since April 1963, administrative control of these has been transferred to State Governments and Union Territories.

ATOMIC ENERGY AND OUTER SPACE RESEARCH

The Atomic Energy Commission is responsible for planning and implementing the programme for the development of atomic energy for peaceful purposes. The programme aims at encouraging the use of atomic energy in agriculture, biology, industry and medicine, mainly through the production and application of radioisotopes; and at the development of atomic energy as a source of electric power. The programme is under the charge of the Department of Atomic Energy.

The national centre for research and development of atomic energy is the Atomic Energy Establishment at Trombay, near Bombay. There are three nuclear reactors at the Trombay Establishment—"Apsara", a one megawatt pool type reactor; the "Canada-India Reactor" which is a 40 mw reactor and potentially one of the world's largest isotope producers; and "Zerlina", a zero energy experimental reactor. Other production facilities at the Trombay Establishment include a Thorium Plant and a Uranium Metal Plant, producing thorium and uranium of high nuclear purity. A Fuel Element Fabrication Plant produces fuel elements for the "Canada-India Reactor" and "Zerlina". This plant is also used for research and development work in new fuels and materials.

The Establishment is organised under five major groups, namely, Physics, Chemical, Electronics, Metallurgy and Biology. These groups are further sub-divided into 15 divisions. The Atomic Energy Establishment has been meeting the bulk of the national requirements of radioisotopes and has also been exporting some to other countries. It runs film badge and health survey services for ensuring safety of persons handling radioactive materials. The Electronics Division of the Establishment fabricates a large number of sophisticated supersensitive electronic instruments for its own work and for other institutions and industries in India engaged in nuclear research and work on radiation sources. Among other facilities at the Establishment is a 5.5 MeV Van de Graaff accelerator for experimental studies in the field of nuclear physics.

Work is also being conducted in the field of induction of mutations in plants of economic importance such as rice, groundnuts, etc. Some of the mutations induced at the Experimental Field Station at Trombay have resulted in new strains of rice with such favourable features as higher yield, finer grains, early flowering and whiter kernels. Experiments are also being carried out for developing radiation methods for the preservation of food.

Among the schemes included in the Third Five Year Plan are : (i) the setting up of a Radiation Medicine Centre where medical workers will be trained in the handling of radioisotopes in research, diagnosis and therapy; (ii) expansion of fundamental and applied research in diverse aspects of cancer and several other diseases with the help of radioisotopes in close collaboration with the Indian Cancer Research Centre and the Tata Memorial Hospital.

The Atomic Minerals Division of the Department is charged with the function of conducting comprehensive geological surveys for the location of atomic minerals, development of mineral technology, drilling, mining, stockpiling and conservation of atomic minerals.

The major proved source of uranium ore in India is in Jaduguda in Bihar. A separate project, the Jaduguda Mines, has been constituted for the purpose of achieving the efficient and speedy execution of the programme of exploiting indigenous uranium sources for avoiding continued dependence on foreign supplies of uranium concentrates needed for India's atomic energy programme. A uranium mill is to be set up at Jaduguda for processing the uranium ore obtained from the mines.

Financial assistance to universities and research institutions has been provided to promote research in various branches of nuclear science. The Tata Institute of Fundamental Research, Bombay, is the national centre for advanced study and fundamental research in nuclear science and mathematics. Other institutions receiving assistance are the Saha Institute of Nuclear Physics, Calcutta, and the Physical Research Laboratory, Ahmedabad. A High Altitude Research Laboratory at an altitude of 9,000 feet is being set up at Gulmarg in Kashmir. A similar laboratory is also to be established at Kodaikanal in Madras State. Fellowships and scholarships tenable in various universities and science institutions in India are also provided.

Close liaison and contact is maintained with international bodies concerned with the peaceful uses of nuclear energy. Bilateral agreements for collaboration in the development of atomic energy for peaceful uses have been concluded with a number of countries.

The Department also carries out industrial operations for producing all the materials required for a full-fledged atomic power programme. The industrial undertakings of the Department include the Travancore Minerals Limited, producing ilmenite and monazite; and the Indian Rare Earths Limited, producing rare earth compounds as its main product.

Considerable work has been done in setting up the first atomic power plant

at Tarapur, 60 miles from Bombay, which is expected to have a capacity of 380 mw and is likely to be in operation by 1966. A second nuclear power station initially of 200 mw capacity is to be set up at Rana Pratapsagar in Rajasthan. The site for a third nuclear power station has been selected at Kalpakkam near Mahabalipuram in Madras State.

An Indian National Committee on Space Research (INCOSPAR) has been constituted to aid and advise in the formulation and execution of policies on the peaceful uses of outer space. Seven sounding rockets have been successfully fired since November 21, 1963 from the Thumba Equatorial Rocket Launching Station in Kerala. A satellite ground communication facility for participation in the programme to develop a system of communications via satellites will also be set up.

OTHER DEPARTMENTAL RESEARCH ACTIVITIES

There are eleven Hydraulic Research Stations under the Central Board of Irrigation and Power. The Central Water, Power and Irrigation Research Centre, Khadakvasla (near Poona), is the pioneer hydraulic research station in India.

A Research and Development Directorate has been set up under the Ministry of Transport (Directorate-General of Civil Aviation). It is concerned with type certification, manufacture of aircraft and development of specifications for aircraft materials.

The Botanical Survey of India located at Calcutta appraises the plant wealth in the country and maintains five regional circles at Dehra Dun, Coimbatore, Poona, Allahabad and Shillong, in addition to a Central Botanical Laboratory, a Central National Herbarium and Botanical Galleries in Indian Museum in Calcutta. The Survey also maintains the Indian Botanical Garden, Sibpur (Howrah).

The Zoological Survey of India, with headquarters at Calcutta, maintains the standard zoological collections of India, identifies zoological specimens, collects information on the zoology of India and brings out journals, monographs and books. Six regional stations have been established by the Survey at Shillong, Poona, Jabalpur, Jodhpur, Madras and Dehra Dun.

The Geological Survey of India, with headquarters at Calcutta and established more than a hundred years ago, is responsible for the preparation of the geological map of India. The field work of the Survey is conducted through eight regional circles.

The Department of Anthropology, with headquarters at Calcutta, is responsible for conducting anthropological surveys including social, psychological, economic, linguistic, physical, genetic and instructional investigations.

The India Meteorological Department, organised on an all-India basis for the first time in 1875, provides advanced information about weather conditions. The scientific activities of the Department include meteorology in all its aspects, meteorological instrumentation, terrestrial magnetism and atmospheric electricity, seismology and astrophysics.

The primary role of the Survey of India with headquarters at Dehra Dun is to carry out topographical surveys and to prepare up-to-date maps.

The Forest Research Institute at Dehra Dun conducts research in the utilisation of timber for constructional purposes.

The All India Radio maintains a research unit in New Delhi to investigate problems relating to the propagation and reception of radio waves and the design and performance of radio receivers.

The Railway Board has established a research centre at Lucknow with sub-stations at Lonavla and Chittaranjan to investigate problems referred to them by the railway workshops and the Central Standards Office (Railways).

The problems of road development and road materials, highways and

bridge engineering, ports and harbours, etc., are dealt with by the Roads Organisation functioning under the Ministry of Transport.

The Indian Standards Institution, functioning under the Ministry of Industry, lays down standard specifications for materials, products, practices, etc., and promotes quality control. It issues licences to manufacturers for providing third party guarantee about quality of products. It also collaborates with several international standards organisations.

OTHER INSTITUTIONS

A number of research organisations financed by private endowments and Governmental assistance are engaged in the field of scientific research. The more important of these are dealt with in the following paragraphs.

The Bose Institute, Calcutta, is engaged in research in physics, chemistry, plant physiology, plant breeding cytogenetics, micro-biology and zoology.

The Birbal Sahani Institute for Palaeobotany, Lucknow, carries out research in the fossil flora of India and related problems.

The Indian Association for the Cultivation of Science, Calcutta, one of the oldest research organisations in the country, conducts research in fundamental and applied aspects of physics and chemistry.

The Indian Institute of Science, Bangalore, undertakes advanced instruction and conducts original investigations in all branches of scientific knowledge.

The Physical Research Laboratory, Ahmedabad, is a centre for research in atmospheric physics, cosmic rays, electronics and theoretical physics.

The Maharashtra Association for the Cultivation of Science, Poona, conducts research in botany, micology, plant pathology, entomology, bio-chemistry and soil science.

The Shri Ram Institute for Industrial Research in Delhi renders research service to industrial concerns.

Several colleges, universities and research institutions provide courses of study and research facilities in various branches of science.

MEDICAL RESEARCH

The Indian Council of Medical Research has been engaged in the promotion and co-ordination of research in India ever since its establishment in 1912. It maintains the Nutrition Research Laboratories at Hyderabad, the Virus Research Centre at Poona and the Blood Group Reference Centre at Bombay. It provides grants-in-aid, disseminates information on medical research and publishes two journals.

The National Malaria Institute at Delhi carries out research in methods of malaria eradication.

Apart from medical colleges and attached hospitals each specialising in some branch of research, the country has a number of specialised institutions. The All-India Institute of Hygiene and Public Health, Calcutta, provides training in preventive and social medicine for diseases peculiar to India and ascertains how the results of pure and applied research can be utilised for promoting medical protection and positive health. The School of Tropical Medicine, Calcutta, carries out research in diseases peculiar to tropical areas.

The King Institute of Preventive Medicine, Guindy, Madras, conducts research in the preparation of bacterial vaccines, sterile solutions and therapeutic sera.

Research in tuberculosis and other chest diseases is in progress at the Vallabhbhai Patel Chest Institute, Delhi. Studies of the morphology of the tubercle bacilli and the effect on them of the different drugs constitute a special feature of its investigations.

The Lady Willingdon Leprosy Sanatorium at Chingleput and the

Silver Jubilee Children's Clinic at Saidapet have been taken over from the Madras Government and converted into the Central Leprosy Research Institute.

The Haffkine Institute, Bombay, undertakes investigations in the manufacture of vaccines, sera and other biological products. It has been functioning as the chief centre for investigations connected with the prevention and treatment of plague. The scope of the Institute's work has been enlarged to cover, among others, the problems of nutrition, malaria and virus diseases.

Investigations on cancer are carried out at the Indian Cancer Research Centre, Bombay. Statistical surveys of the incidence of cancer in India have also been undertaken by it.

Investigations in the Central Research Institute, Kasauli, relate to problems of microbiology, serology and biochemistry. The Institute maintains a pathological museum.

The Pasteur Institute, located at Coonoor, is engaged on research in rabies, influenza, anti-venom serum, tropical eosinophilia and serological reactions.

The activities of the Central Drugs Laboratory, Calcutta, centre round biological and chemical assays of drugs. The Laboratory maintains a herbarium and tenders technical advice to concerns manufacturing drugs.

One among several private owned research organisations is the Bengal Immunity Research Institute, Calcutta, which conducts research on a large range of problems which have a bearing on the prevention, control and cure of diseases.

AGRICULTURAL RESEARCH

The Indian Council of Agricultural Research, established in 1929, undertakes, aids, promotes and co-ordinates agricultural and animal husbandry education and research in India.

The Indian Agricultural Research Institute, New Delhi, is the oldest institution devoted to research in agricultural science. It has well-equipped laboratories and extensive farms for carrying out large-scale investigations on food crops.

The Indian Veterinary Research Institute, Izatnagar, deals with veterinary diseases and their cure, while the National Dairy Research Institute at Karnal concerns itself with research connected with quality of milk and analysis of milk samples for quality control purposes. The Central Rice Research Institute at Cuttack and the Central Potato Research Institute at Simla devote themselves to problems of research relating to rice and potatoes respectively.

There are nine commodity committees which devote themselves to research in specific commodities namely, cotton, jute, sugarcane, coconut, tobacco, oilseeds, arecanut, spices and lac. These committees have their own laboratories and research institutions.

The Central Marine Fisheries Research Station, Mandapam, carries out biological investigations in edible fish found in the coastal waters of the country.

The Central Inland Fisheries Research Station, Barrackpore, conducts research in inland fish—estuarine, riverine, lacustrine and pond fish.

The Central Fisheries Technological Research Stations at Cochin and Ernakulam undertake studies in fishing gear material, gear design, fishing methods and preservation of fish and fish products.

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CHAPTER VIII

HEALTH

The steady improvement in the general health of the population is reflected in broad terms in the following table showing the birth, death and infant mortality rates during 1958-61.

TABLE 39
VITAL HEALTH STATISTICS

Year	(per thousand of population)		Infant mortality rate per thousand of live births
	Birth rate	Death rate	
1958	22.3	11.5	102.4
1959	23.6	9.9	87.9
1960	22.8	10.0	86.9
1961	27.7	11.4	83.0

Health programmes are primarily the responsibility of the State Governments. The Union Government have, however, sponsored and supported major schemes for improving the standard of health of the nation under the Plans. The broad objective of the health and family planning programmes has been to expand health services, to bring about progressive improvement in the health of the people by ensuring a certain minimum of physical well-being and to create conditions favourable to greater efficiency and productivity. As against outlays of Rs. 140 crores and Rs. 225 crores in the First and Second Plans respectively, the health and family planning programmes in the Third Plan involve an outlay of about Rs. 342 crores, of which Rs. 297 crores will be in the States' sector and the rest in the Central sector.

PREVENTION AND CONTROL OF DISEASES

Malaria

The National Malaria Control Programme, launched in 1953, was converted into the National Malaria Eradication Programme from April 1, 1958. The programme is being implemented by the Union Ministry of Health with the active participation of the State Governments as well as with the assistance of the United States Agency for International Development and the World Health Organisation. The National Institute of Communicable Diseases is responsible for research and for the training of staff in methods of malaria eradication. Six regional co-ordinating organisations have been established at Bangalore, Baroda, Bhubaneswar, Hyderabad, Lucknow and Shillong.

The entire population of the country is covered by 391 malaria units, of which 288 have entered the "Consolidation Phase" of the programme. Seventy to eighty of these units entered the "Maintenance Phase" in April 1964, having completed the eradication programme. One unit has recently been allotted to Bhutan.

The percentage of clinical malaria cases treated in hospitals and dispensaries to cases treated for all diseases fell from 10.8 in 1953-54, when the control programme commenced, to 0.2 during the first three quarters of 1963, thus showing a decrease of 98 per cent.

Filaria

The National Filaria Control Programme, launched in 1955, consists of (i) mass administration of drugs on filariotic communities, and (ii) anti-mosquito and anti-larval measures. Fifty control units and 22 survey units are functioning. Random sample surveys covering a population of about 270 lakhs were completed by the end of December 1963. They have revealed that over 680 lakh persons live in the filariotic areas of the country. A centre for practical demonstration and field training is functioning at Kozhikode and a new training centre has been started at Rajahmundry.

Tuberculosis

The National TB Survey, which was completed in 1958 by the Indian Council of Medical Research, showed that nearly 50 lakh persons suffer from active or probably active tuberculosis. It revealed that (i) the morbidity from TB varies from 7 to 30 per thousand persons in different regions; (ii) the prevalence of the disease in villages, small towns and cities is not as markedly different as originally thought; (iii) the morbidity rate is lower for females than for males; (iv) the prevalence of TB is considerably higher in the age group 45 years and above than for other groups; and (v) bacteriologically positive cases vary from 1 to 11 per thousand persons in different areas.

The BCG Vaccination Programme, started in 1948 with the help of the International Tuberculosis Campaign and later of the WHO and the UNICEF, extended protection to 16.4 crore persons—7.8 crores of whom were below 15 years of age—by the end of the Second Plan period. By the end of December 1963, 20.91 crore persons were tested and another 7.49 crore persons vaccinated. One hundred and seventy-four BCG teams are engaged in the field work. During the Third Five Year Plan period it is proposed to cover 10 crore children below 15 years of age.

Research in tuberculosis is being undertaken at the TB Chemotherapy Centre, Madras and the Tuberculosis Research Unit, Madanapalle. Thirteen demonstration and training centres have been established at Agra, Ahmedabad, Bangalore, Calcutta, Cuttack, Egmore (Madras), Hyderabad, Madras, Nagpur, New Delhi, Patiala, Patna and Trivandrum. Training is also imparted at other institutions such as the Vallabhbhai Patel Chest Institute at Delhi. Training centres in six universities train doctors for the diploma course in tuberculosis. A National Tuberculosis Institute has been established at Bangalore with the assistance of UNICEF and WHO.

At the end of 1962, there were 140 sanatoria and hospitals, 225 clinics, 152 wards and over 27,000 beds available for TB patients. There are 15 after-care colonies in India where ex-patients are rehabilitated after they are cured. A work centre to impart vocational training to patients under domiciliary treatment has been established at Madras and eight more such centres will be set up at Amargarh, Delhi, Dhubulia, Hyderabad, Lucknow, Mysore, Pedavegi and Poona. A scheme for the establishment of open air centres for isolation and treatment of advanced cases has been approved and the setting up of 430 such centres in Andhra Pradesh, Jammu and Kashmir, Mysore and Punjab has received sanction.

Two hundred more clinics, 25 more mobile clinics in rural areas, five more Tuberculosis Demonstration and Training Centres, about 5,000 more beds and 7 After-care and Rehabilitation Centres are included in the targets of the Third Plan.

The Tuberculosis Association of India is the largest voluntary organisation in the country. Since its establishment in 1939, it has been engaged in stimulating anti-tuberculosis activities in a scientific and co-ordinated manner. It assists the authorities in combating the disease and provides assistance through the Tuberculosis Workers' Conferences, the State TB

Association Secretaries' Conference, the technical committees and forums which bring together State officials and voluntary workers. It also runs several institutions which provide training facilities and demonstrate advanced methods for the treatment of TB cases.

Leprosy

The number of leprosy cases in India is now estimated at 25 lakhs. Andhra Pradesh, Bihar, Kerala Madhya Pradesh, Madras, Mysore and certain parts of Maharashtra, Uttar Pradesh and West Bengal are areas of high incidence.

Under the Leprosy Control Scheme, started during the First Plan period, four treatment and study centres (one each in Madras, Madhya Pradesh, Uttar Pradesh and West Bengal) and 29 subsidiary centres in different States were established. The subsidiary centres provide for mass treatment of all cases, detection of cases in the early stages of infection and their treatment. The treatment and study centres carry out a detailed survey to study its epidemiology and assess the results of sulphone therapy. During 1963-64, 162 leprosy control units, 386 survey, education and treatment centres and 34 voluntary agencies were functioning. Up to September 1963, the National Leprosy Control Programme had covered a population of 3.03 crores, examined 1.43 crore people, registered 3,80,604 cases, and had 3,58,650 persons under treatment. An advisory committee reviews the working of the scheme and suggests measures for improvement.

Short-term orientation courses in anti-leprosy work for doctors are being provided at the All-India Leprosy Training Centre, Nagpur and the Central Leprosy Teaching and Research Institute, Chingleput, Madras. Para-medical workers receive training at seven centres, one each set up in Andhra Pradesh, Kerala, Madhya Pradesh, Madras, Maharashtra, Orissa and Uttar Pradesh. So far 154 medical officers and over 1,000 para-medical workers have been trained.

The Mission to Lepers, established in 1875, is a voluntary organisation engaged in anti-leprosy work. Important among other such voluntary organisations are Hind Kusht Nivaran Sangh, Maharogi Seva Mandal, Gandhi Memorial Leprosy Foundation, Ramakrishna Mission and Vidarbha Maharogi Seva Mandal.

Venereal Diseases

Sixteen years ago it was estimated that about five per cent of the population suffer from syphilis and an equal percentage from gonorrhoea. Yaws is prevalent in a few districts of Andhra Pradesh, Orissa, Madhya Pradesh and Maharashtra.

A demonstration team, established by WHO in Himachal Pradesh in 1949, carried out an extensive survey and a mass treatment programme and trained several teams deputed by the State Governments.

Five VD clinics at State headquarters and 108 at the district level were established by the end of March 1962. The number of such clinics, as on October 31, 1963, stood at 223. Between January and October 1963, these clinics treated 3,42,949 cases. The clinics lay emphasis on the integrated function of both prevention and treatment, the epidemiological and case-finding functions, surveys and liaison with local maternity and child health centres for routine ante-natal blood testing.

An intensive mass campaign based on total treatment of the entire population at risk in the Kulu valley of the Punjab was launched in September 1959. Anti-yaws teams, operating in Andhra Pradesh, Madhya Pradesh, Maharashtra and Orissa have covered a large portion of the population at risk.

Medical and para-medical personnel are given refresher training in the modern treatment of venereal diseases at the Training and Demonstration

Centre in New Delhi and the Institute of Venereology, Madras. The latter also offers post-graduate training.

During 1963-64, the Government of India continued to give assistance to State Governments to meet recurring expenditure on running VD clinics, to establish new clinics and to implement the inter-laboratory serological evaluation programme. Assistance was also given in the shape of stipends to trainees and free supply of PAM and VDRL antigen. A Central VD Advisory Committee was also constituted during the year.

Influenza

An influenza centre was opened in 1950 at the Pasteur Institute, Coonoor. The centre makes study of and research in problems relating to influenza.

Smallpox

The National Smallpox Eradication Programme, launched in 1962, has been completed in 78 districts and is in progress in 151 districts. So far 20.6 crore people have been vaccinated or re-vaccinated.

Trachoma

On completion of pilot studies during 1956-62, the National Trachoma Control Programme was launched during 1963-64. The States of Punjab, Rajasthan and Uttar Pradesh, which have high prevalence rates of 79.1, 74.3 and 68.1 per cent respectively and which contribute the largest number of personnel to the Defence Forces, have been given priority. The schemes in these three States are Centrally sponsored. The States of Bihar, Gujarat, Jammu and Kashmir and Madhya Pradesh have also undertaken programmes on a limited scale on the basis of 50 per cent assistance from the Centre. The Government of India have allotted Rs. 88 lakhs for the control operations during 1963-66.

Cancer

Problems relating to cancer are under investigation at the Tata Memorial Hospital, Bombay, the Indian Cancer Research Centre, Bombay, the Cancer Institute, Madras and the Chittaranjan National Cancer Research Centre, Calcutta. Cobalt Beam Therapy Units are available in ten hospitals in the country located at Bombay, Calcutta, Ludhiana, Madras, Vellore, Trivandrum, New Delhi, Hyderabad, Cuttack and Kanpur.

NUTRITION AND PREVENTION OF FOOD ADULTERATION

Surveys conducted in India since 1935 have revealed quantitative as well as qualitative deficiency in the diet of the Indian people. The average Indian diet lacks essential food elements like proteins, fats, minerals and vitamins, due to a deficiency of protective foods like vegetables, fruit, milk and eggs.

The general raising of dietary standards is largely an economic problem and is linked up with the development of the economy. Several measures have, however, been taken to meet the nutritional deficiency of certain vulnerable sections of the Indian population, such as expectant and nursing mothers, school children and industrial workers. The measures taken include school feeding programmes, distribution of skimmed milk, protein supplement to the diet of the vulnerable groups, opening of canteens in industrial concerns and offices, and manufacture and popularisation of cheap and nutritious food.

More than 16 crore pounds of dried skim milk were distributed under the UNICEF Milk Feeding Programme since its inception in 1948. An estimated 11 lakh mothers and children received milk through maternity and child health centres and about 10 lakh children through schools.

Mid-day meals or milk are being provided to about 40 lakh children—15 lakh each in Madras and Kerala, 5 lakh in Punjab and the rest in

others areas. These programmes, launched with the assistance of CARE, have been extended to 2 lakh children in Andhra Pradesh and 5 lakh in Rajasthan.

Consumer trials to assess acceptability of protein supplements such as multi-purpose food have been conducted. The results indicate that multi-purpose food produced by the Central Food Technological Institute, Mysore, is not only acceptable but beneficial to health.

The Nutrition Advisory Committee of the Indian Council of Medical Research sponsors schemes for nutrition research, besides advising the Government of India on nutrition matters.

The National Nutrition Advisory Committee was appointed in June 1960, to formulate a national nutrition policy and to recommend measures for improving the nutritional status of the population. Three working groups were appointed by the Committee to undertake detailed studies and formulate specific proposals for (i) production and utilisation of food, (ii) training, education and extension services in the field of nutrition, and (iii) programmes designed to improve nutritional status of population groups and their implementation. Several recommendations have since been made by the Committee.

Diet and nutrition surveys, distribution of skimmed milk and food supplements and school feeding are among measures being carried out in Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Madras, Maharashtra, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal.

Diploma courses for dieticians are being conducted at the All-India Institute of Hygiene and Public Health, Calcutta, since 1947. Twelve diet kitchens have been established in Andhra Pradesh, Bihar, Madhya Pradesh, Madras, Maharashtra, Punjab, Uttar Pradesh and West Bengal, for introducing diet therapy for treatment of nutritional diseases.

An Applied Nutrition-cum-Training Programme has been launched in Andhra Pradesh, Madras, Orissa and Uttar Pradesh with the assistance of UNICEF, FAO and WHO. The programme aims at training, education and practical nutritional activities to improve nutritional status in rural areas.

Prevention of Food Adulteration

The Prevention of Food Adulteration Act, 1954, and the Rules made thereunder are in force throughout the country, except Jammu and Kashmir. It provides for deterrent punishment to offenders and prohibits the manufacture, import or sale of adulterated food articles. The Central Committee for Food Standards and the Central Food Laboratory, Calcutta, envisaged in the Act, have been set up. The former advises the Central and State Governments on matters arising out of the administration of the Act, while the latter is carrying out investigations to standardise methods of detection and estimation of colouring matter and antioxidants in food. To make the Act more effective, a Bill has been introduced in Parliament. It provides for enhanced punishment for adulteration and appointment of Food Inspectors by the Government of India.

WATER SUPPLY AND SANITATION

National Water Supply and Sanitation Programme

The National Water Supply and Sanitation Programme, launched in 1954, continues during the Third Five Year Plan period with a provision of Rs. 88.95 crores for the urban and Rs. 16.33 crores for the rural schemes. Most of the 369 urban water supply schemes, 100 urban drainage schemes and 344 rural water supply and sanitation schemes, estimated to cost Rs. 102.17 crores under the first two Plans, have been completed. Since the inauguration of the Third Five Year Plan, 225 urban water supply

schemes and 63 sewerage schemes of a total value of Rs. 35 crores have been taken up. A Drinking Water Board, set up in April 1963, seeks to expedite the implementation of programmes by providing effective liaison between the Central and State Governments and by smoothening administrative procedures and handicaps.

The programme also provides for the training of public health engineering personnel for implementing the programme. The training programme is being implemented at the All-India Institute of Hygiene and Public Health, Calcutta, the Engineering College, Guindy, the Engineering College, Roorkee, and other selected regional field centres. The Central Public Health Engineering Organisation has been set up for helping State Governments in the preparation and execution of their schemes and for giving technical advice and guidance. Similar organisations have also been established in most of the States.

MEDICAL RELIEF AND SERVICE

Medical relief and service is primarily the responsibility of the States. Certain charitable institutions also participate in giving medical relief. The Third Five Year Plan aims at 14,600 hospitals and dispensaries with 2,40,100 beds in 1965-66 as compared to 8,600 and 1,13,000 in 1950-51, 10,000 and 1,25,000 in 1955-56 and 12,600 and 1,85,600 in 1960-61. Five thousand primary health units is the target for 1965-66 as compared to 725 in 1955-56, 2,800 in 1960-61 and 3,330 up to the end of February 1963. Ten thousand maternity and child welfare centres are to come into existence by 1965-66 as against 1,651 in 1950-51, 1,856 in 1955-56 and 5,873 up to the end of 1961.

At the end of 1962, there were 65,934 pharmacists, 39,350 nurses, 46,232 midwives and 2,052 health visitors. The number of registered dentists on March 31, 1962, was 4,123.

Central Government Health Scheme

The Contributory Health Service Scheme, now known as Central Government Health Scheme, came into operation on July 1, 1954. Earlier confined only to Central Government employees and their families in Delhi and New Delhi, the scheme has also been extended to Bombay from November 1963. The staffs of certain autonomous and semi-Government organisations and their families have been admitted into the scheme. The facilities under the scheme are also available to the members of Parliament. The contributions are based on a graduated scale varying from 50 P. to Rs. 12 per month according to emoluments. There are now 351 full-time medical officers, including 57 specialists. The number of dispensaries in Delhi is 47, excluding mobile dispensaries serving beneficiaries residing in outlying areas. The number of beneficiaries under the scheme is 5.58 lakhs.

Health Insurance

The Health Insurance Scheme, which provides *inter alia* medical benefits to industrial workers under the Employees' State Insurance Act, 1948, now covers over 20.18 lakh workers in the country. Under the scheme an insured worker and his family are entitled to receive medical help at the State Insurance dispensaries or at panel doctors' clinics, at their residences and in hospitals.

Colliery and mica workers receive medical help in institutions maintained by the Coal Mines Labour Welfare Fund and the Mica Mines Labour Welfare Fund. Private employers as well as the State Governments provide medical relief to their employees.

Primary Health Centres for Rural Areas

There were 3,763 Primary Health Centres functioning in the country at the end of 1963, as against 2,691 at the end of the Second Plan period. The country has been delimited into 5,223 blocks and the aim is to provide at least one Primary Health centre in each block by the end of the Third Plan period. Each centre serves the block area with an average population of 66,000. From the centre a team of health workers goes round the surrounding areas and looks after their curative and preventive health needs.

INDIGENOUS AND HOMOEOPATHIC SYSTEMS OF MEDICINE

It is the accepted policy of the Government to give all possible encouragement to the indigenous and homoeopathic systems of medicine and incorporate contributions of approved value from them in the modern system of medicine. Several measures have been taken by the Union and State Governments in this direction. As against a provision of Rs. 6.21 crores in the Second Plan, the Third Plan provides Rs. 9.8 crores for the development of indigenous systems of medicine.

Udupa Committee

A committee appointed under the chairmanship of K. N. Udupa, to assess and evaluate the present status of the Ayurvedic system of medicine, made recommendations in 1959 on the training, research and pharmaceutical products and status of practice in Ayurveda. A Central Council of Ayurvedic Research has been set up in pursuance of one of the recommendations. The functions of the Council are to advise the Government of India on (i) the formulation of a co-ordinated policy of research in Ayurveda, (ii) stimulation of such research, and (iii) allocation of Central assistance to institutions carrying on research in Ayurveda.

Central Institute of Research in Indigenous Systems of Medicine

The Central Institute of Research in Indigenous Systems of Medicine, established in 1953 at Jamnagar, has a 50-bed hospital and an out-patient department, besides a pharmacy, a museum and a pathological research laboratory. A 'Siddha' unit was added to the Institute in 1956-57. A section of the Institute investigates and studies diagnosis and treatment in Ayurvedic and 'Siddha' systems from the point of view of modern medicine.

Ad hoc schemes of research in Ayurveda and Unani are also being promoted by grants to States, educational institutions and non-governmental research organisations.

A List of Ayurvedic and Unani colleges is available in the Appendices.

Education

A post-graduate training centre in Ayurveda has been established at Jamnagar. Another post-graduate-cum-research centre started functioning at Banaras Hindu University from April 1963.

Regulation of Practice

State Boards have been set up in almost all States for the regulation of practice in indigenous systems of medicine.

Homoeopathy

There are over 30 institutions imparting training in homoeopathy, and some are recognised by the State Boards. Financial assistance is being provided by the Government of India for upgrading some of these institutions. Boards have been set up by the State Governments for the regulation of practice in homoeopathy.

An advisory committee on homoeopathy advises the Union Government on matters relating to its development. A Homoeopathic Pharmacopoeia Committee has drafted a questionnaire and list of drugs and these are being circulated to elicit information.

DRUG MANUFACTURE AND CONTROL

Drug Control

The Drugs Act and the Drugs Rules are in force in all the States except Jammu and Kashmir. The Union Government have powers to keep a check on the quality of imported drugs. The State Governments are responsible for controlling the quality of drugs which are manufactured, sold and distributed in the country. Amendments to the Drugs Act made in 1955, 1960 and 1961 empower the Central Government to assist State Governments in enforcing control over the quality of manufactured drugs.

The Drugs Technical Advisory Board to advise on technical matters arising out of the administration of the Act, and the Drugs Consultative Committee to advise the Central and State Governments for securing uniformity throughout India in the administration of the Act, have been formed.

The first Indian Pharmacopoeia was published in 1955 and a supplement to it in 1960. The National Formulary of India was also published in 1960. Both of these publications are being revised.

The Central Drugs Laboratory, Calcutta, serving as a statutory institution under the Drugs Act, analyses and tests samples of such drugs as are sent to it and performs such other functions as are entrusted to it by the Central and State Governments.

Drugs and Magic Remedies (Objectionable Advertisements) Act

This Act, which came into force on April 1, 1955 and was amended in 1963, prohibits the publication of objectionable advertisements relating to sexual stimulants, alleged magic cures for venereal diseases and diseases peculiar to women. Import and export of objectionable advertisements are controlled in close liaison with the customs and postal authorities who can, under Section 6 of the Act, intercept articles suspected to contain objectionable advertisements. Liaison is also maintained with Indian Embassies, High Commissions, Legations and Consulates abroad. Advertisements of contraceptives are, however, permitted in view of the importance of family planning.

Drug Manufacture

The BCG vaccine Laboratory was established at Guindy in Madras in 1948. Up to December 1963, the Laboratory manufactured 3,15,18,490 c.c. of BCG vaccine and 5,42,90,947 c.c. of tuberculin. It supplies tuberculin and BCG vaccine free to all States and institutions engaged in the BCG campaign, tuberculin and BCG vaccine to Afghanistan and Ceylon and vaccine to UNICEF-sponsored projects in Burma, Pakistan and Malaya.

The Central Research Institute at Kasauli, established in 1905, supplies vaccine for TAB, cholera, rabies, antivenom sera, tetanus toxoid, diphtheria anti-toxin and influenza vaccines. Influenza vaccines are also manufactured at the Influenza Centre, Coonoor.

The Hindustan Antibiotics Ltd., Pimpri, and the DDT factory at Delhi, have already gone into production.

The Haffkine Institute at Bombay manufactures sulpha drugs and the Imperial Chemical Industries (India) Ltd., and the Tatas manufacture BHC (benzene hexachloride).

Medical Depots and Factories

The Medical Stores Organisation, having five depots at Madras, Bombay, Hyderabad, Calcutta and Karnal, is maintained primarily for ensuring supply of medical stores of proper quality and approved pattern to Government, semi-Government and certain non-Governmental institutions.

At the factories of the Organisation, a large number of drugs and dressings are manufactured to meet the requirements of both civil and military medical stores depots. There is also a repair workshop at the Madras depot for repairing surgical instruments and appliances.

EDUCATION AND TRAINING

Medical education in general is the responsibility of the States. The Government of India's interest is limited to the promotion of higher studies and specific schemes of research and specialised training.

There are at present 79 medical colleges, 13 dental colleges* and 11 other institutions for training in the allopathic system of medicine. Establishment of new medical colleges and expansion of existing ones under the Plans had raised the admission capacity of these institutions from 3,660 in 1955 to 10,000 in 1962. Expansion of dental colleges at Madras, Amritsar, Lucknow, Calcutta and Bombay and starting of new dental colleges at Trivandrum and Hyderabad were also aided by the Union Government during the Second Plan period. To provide post-graduate training to select doctors in different branches of medicine and surgery, certain institutions have been upgraded with Central assistance. Financial aid has also been provided for the establishment of full-time teaching units in the clinical and non-clinical departments of medical colleges. Departments of Social and Preventive Medicine were started in eight medical colleges during the First Plan period and in ten other colleges during the Second Plan period. Schemes for the opening and expansion of medical and dental colleges are also included in the Third Plan. A target provision of Rs. 56.3 crores has been provided for medical education, training and research. Under the Plan, 300 additional scholarships have been provided for candidates undergoing post-graduate courses. During 1963-64, 439 candidates were selected for receiving scholarships.

Central Health Education Bureau

The Bureau, established in November 1956, co-ordinates and promotes health education in the country. It functions through four main divisions, namely, Media, Training, School Health and Research. It produces a monthly bulletin 'Swasth Hind' and a quarterly for the Central Public Health Engineering Organisation and maintains a film library. State Health Education Bureaus have been established in most of the States.

All-India Institute of Medical Sciences

The All-India Institute of Medical Sciences was set up in 1956 under an Act of Parliament. An under-graduate course leading to the Bachelor's degree and post-graduate courses in certain subjects are offered by the Institute. Besides the medical college, the Institute will have a dental college, a nursing college, a post-graduate teaching centre and a 650-bed hospital.

Specialised Training

Facilities for the training of nurses exist in practically all major hospitals in the country and in the nursing colleges at Bombay, Hyderabad, New Delhi, Indore and Vellore. State Governments and non-official organisations like the Andhra Mahila Sabha, Madras, have organised short-term courses with the help of grants from the Centre. There are 472 nursing schools and colleges in the country for training nurses, midwives, health

*For a list of medical and dental colleges, see Appendices.

visitors and auxiliary midwives. Of 24,287 students enrolled, 8,490 qualified by the end of 1963—3,006 nurses, 2,817 midwives, 2,248 auxiliary midwives, 370 health visitors and 49 nursing graduates—under different courses.

The Malaria Institute of India, Delhi, now known as the National Institute of Communicable Diseases, is conducting training courses for health personnel working under the schemes to control malaria and filaria. In 1963, the Government decided to expand the activities of the Institute to make it a centre for studies on various problems connected with communicable diseases. Training leading to a diploma in public health, maternity and child health, nutrition and dietetics and leading to a degree in public health engineering is imparted by the All-India Institute of Hygiene and Public Health, Calcutta. It also offers facilities for research and specialised studies.

FAMILY PLANNING

The objects of the family planning programme, as outlined by the Planning Commission, are (i) to obtain an accurate knowledge of factors contributing to the rapid increase of population in India; (ii) to discover suitable techniques of family planning and devise methods by which knowledge of these techniques can be widely disseminated; and (iii) to make advice on family planning an integral part of service in Government hospitals and public health agencies. The family planning policy aims at reducing birth rates to stabilise the population at "a level consistent with the requirements of national economy".

The family planning programme in the Third Plan, with an allocation of Rs. 27 crores and a programme ceiling of Rs. 50 crores, recognises that "the objective of stabilising the growth of population over a reasonable period must be at the very centre of planned development." "In the circumstances of the country, family planning has to be undertaken, not merely as a major development programme, but as a nation-wide movement which embodies a basic attitude towards a better life for the individual, the family and the country." The programme, as outlined, provides for (a) education and motivation for family planning; (b) provision of services; (c) training; (d) supplies; (e) communication and motivation research; (f) demographic research; and (g) medical and biological research.

Organisational Set-up

The Central Family Planning Board was constituted in September 1956 to formulate family planning programmes. The Demographic Advisory Committee, the Committee on Scientific Aspects of Family Planning of the Indian Council of Medical Research and the Family Planning Communication Research Committee have been established. Family Planning Boards are functioning in all the States. District Committees have also been formed. Full-time Family Planning Officers have been appointed in most States.

Family Planning Service/Family Planning Centres

Family planning advice and services are available in 2,720 regular clinics in rural areas and 984 regular clinics in urban areas. In addition, there are 7,233 contraceptive distribution centres in other medical institutions, of which 6,518 are in rural and 715 in urban areas.

Three lakh thirty-three thousand seven hundred and ninety-one persons—2,09,271 males and 1,24,520 females—were reported to have undergone sterilization operations till the end of January 1963.

Education and Training

Apart from the well-known methods of educating the people through group meetings, film shows, advertisements, etc., family planning orientation

camps are being organised. Honorary Family Planning Education Leaders have also been appointed in all the States.

The Government of India have established training centres at **Delhi**, **Bombay** and **Ramanagaram**. The Government of India have also approved the formation of family planning touring training teams, family planning orientation training teams and pilot family planning education mobile units. The State Governments have established regional family planning training centres. Voluntary organisations have, with the assistance of the Government of India, established family planning welfare workers' centres for workers at **Hyderabad**, **Delhi**, **Allahabad**, **Nagpur** and **Madras**.

Research

The Demographic Training Research Centre at **Bombay** is continuing its investigations. Four other demographic centres have been established in **Calcutta**, **Delhi**, **Trivandrum** and **Dharwar**. Twenty-five studies in medical and biological aspects of family planning are in progress at different places. Nine family planning communication research projects have also been financially assisted.

CHAPTER IX

SOCIAL WELFARE

PROHIBITION

The Constitution enjoins on the State to endeavour to bring about prohibition of the consumption of intoxicating drinks and drugs. In December 1954, the Prohibition Enquiry Committee was appointed to suggest a programme and machinery for the implementation of the directive in the light of the experience of the States in implementing their prohibition policies in the past. The Committee's main recommendation that schemes of prohibition be integrated with the country's developmental plans was affirmed by a resolution of the Lok Sabha on March 31, 1956. The resolution recommended the formulation of a programme to bring about nationwide prohibition speedily and effectively.

The Third Five Year Plan lays emphasis on prohibition being a voluntary social welfare movement, whose success depends upon (i) its acceptance as public policy accompanied by concrete administrative steps to make the policy a reality, (ii) support of large sections of public opinion and active participation of social workers and voluntary organisations, (iii) finding practical solutions to problems arising out of it, such as employment, and (iv) enabling State Governments to meet possible loss of revenue on account of progress of prohibition.

A Central Prohibition Committee has been set up to review the progress of prohibition programmes, co-ordinate the activities in different States and keep in touch with their practical difficulties. The Committee also suggests ways and means to intensify propaganda in favour of prohibition, promotes research on the economic and social implications of prohibition and recommends measures to encourage and assist official and non-official agencies devoted to prohibition and temperance propaganda, care and rehabilitation of alcoholics and drink addicts and scientific research in respect of problems associated with prohibition. Non-official agencies called the Nasha Bandi Lok Karya Kshetras have been launched for educating the people in regard to the social and economic implications of prohibition.

In January 1963 the Chief Ministers of States, after an informal discussion on the various aspects of prohibition, came to the conclusion that there should be no relaxation in the existing system. In April 1963 a Study Team was set up under the chairmanship of a retired Judge of the Punjab High Court to assess the magnitude of illicit distillation, examine the existing legislation on prohibition, suggest methods for securing maximum co-operation of voluntary organisations for prohibition enforcement and to study the financial aspects of the prohibition programme.

The progress in the enforcement of the prohibition policy in the different States and Union Territories of the Indian Union is briefly dealt with in the following paragraphs.

Andhra Pradesh

Complete prohibition is in force in the districts of Anantapur, Chittoor, Cuddapah, East Godavari, Guntur, Krishna, Kurnool, Nellore, Srikakulam, Visakhapatnam and West Godavari (except in some agency areas) covering 58.4 per cent of the area and 64 per cent of the population of the State. In the other districts, toddy and liquor shops have been shifted from populous areas.

Assam

The dry law is in force in the districts of Kamrup, Nowgong and Goalpara. In the other districts, measures to discourage the sale and consumption of liquor have been set in motion, the more important of which relate to increase of rates of duty on both foreign and country liquor, stoppage of issuing new liquor licences, removing of liquor shops from industrial areas and tea gardens, the prohibition of serving liquor in public places and closure of liquor shops on national days.

Total prohibition of opium has been in force throughout the State since 1947. Nine opium addicts' treatment centres have been opened. Since July 1959, consumption of ganja and bhang has been totally prohibited.

Bihar

A Prohibition Board to consider details of policy and to review the programmes of its implementation has been established. The work of preparing a phased programme has been entrusted to a technical committee. Among other steps taken to introduce gradual prohibition and to prepare the ground for total prohibition, mention may be made of the enhancement of duty and retail prices of country spirit, introduction of the sliding scale system of settlements in respect of distillery liquor and drug shops, stoppage of sale on national days and closure of liquor shops for a period of eight days in a month in certain areas of the State and a reduction in the sale hours of country liquor shops.

The supply of opium for oral consumption, except on certificates granted in limited numbers by approved medical authorities, has been completely withdrawn since April 1, 1959.

Gujarat

There is total prohibition in the whole of the Gujarat State. A State Prohibition Board, a Committee for reviewing the implementation of the prohibition policy at State level, and District Prohibition Committees for each district (except the Dangs district) have been constituted. On the introduction of Panchayat Raj in the State (except in the Dangs district) from April 1, 1963, the work relating to prohibition propaganda has been transferred to the Education Committees of Village Panchayats.

Kerala

Complete prohibition has been in force in the whole of the Kozhikode, Palghat, Cannanore and Trivandrum districts as also five taluks in the Quilon and Trichur districts and Fort Cochin area of Ernakulam district, covering 58.8 per cent of the area and 56 per cent of the population of the State. Advertisements and public inducements relating to drink have been prohibited. A State Advisory Board has been set up. Six District Advisory Committees have also been established to enlist public co-operation for prohibition in the dry areas of the State. The Prohibition Act which is in force in the State has been amended with effect from August 15, 1962 to make punishments more rigorous.

All opium and ganja shops in the State have been closed from April 1, 1959.

Madhya Pradesh

Prohibition is in force in the districts of Sagar, Damoh, Narsimhpur, Hoshangabad, Khandwa and Vidisha and portions of Bilaspur, Raipur and Durg districts, covering 16.4 per cent of the area and 19.8 per cent of the population of the State. A system of permits has been introduced in one tehsil of the Jabalpur district. Among other steps taken are progressive reduction in the number of liquor shops, ban on advertisements relating to drink, progressive increase in the number of days on which liquor shops

remain compulsorily closed, shifting of liquor shops from industrial and populous areas, enhancement of the prices of intoxicants and encouragement of the consumption of healthy and refreshing light drinks. Liquor drinking at public places and in public functions is prohibited in the areas which formed part of the former Bhopal State.

The oral use of opium, except on permits issued by competent, medical authorities, has been totally banned from April 1, 1959.

Madras

Prohibition has been in force throughout the State since October 2, 1948. The enforcement of the prohibition law has been strengthened by providing enhancement of sentence, summary trials and control over sale and transport of molasses.

Maharashtra

Total prohibition has been in force since April 1, 1961. Besides the Greater Bombay Prohibition Committee and State Prohibition Board, prohibition committees are being set up in districts and taluks. Efforts are now being made to establish similar committees at the village level. Subsidies are paid to welfare institutions for conducting Sanskar Kendras (Recreation Centres) for prohibition propaganda.

Mysore

Prohibition is in force in the entire State except the districts of Gulbarga, Raichur and some taluks of Bangalore district. The dry area accounts for 81.1 per cent of the area of the State and 79 per cent of the population. To facilitate the successful implementation of the prohibition policy of the Government of Maharashtra, a ten-mile dry belt zone on the Maharashtra-Mysore border in the Gulbarga district was created in July 1959. A Prohibition Board has also been set up for advising the State Government in the matter of effective implementation of the prohibition policy. The Taluk Boards and District Development Councils have also been entrusted with the prohibition work in an advisory capacity.

The sale of ganja, except for medicinal and scientific purposes, has been totally banned in the entire State. Consumption of opium, except for medicinal purposes and by addicts on medical certificates, has been completely banned from April 1, 1959.

Orissa

The dry law operates in the districts of Ganjam, Koraput, Cuttack, Balasore and Puri, covering 42.2 per cent of the area and 55.3 per cent of the population of the State. Sale of foreign liquor to addicts in these districts is limited through licensed shops and on production of permits. In the non-prohibition areas, steps have been taken to reduce progressively the number of liquor shops and to increase the number of days on which liquor shops remain closed.

Oral consumption of opium has been prohibited since April 1, 1959, and all opium shops in the State have been closed.

Punjab

Total prohibition exists only in the district of Rohtak and steps have been taken in other districts to reduce consumption of liquor through restricted licensing and sale of liquor, etc. Other steps taken by the State Government include imposing restrictions on advertisements relating to drinking and closure of liquor shops for half day in a week and three other days in the year.

Complete prohibition of the oral consumption of opium, except on medicinal grounds, has come into force since April 1, 1959.

Rajasthan

Prohibition is in force only in Abu taluk in the district of Sirohi. A phased programme has been put into effect since April 1, 1956. Among the more important aspects of this programme are the ban on serving drinks in public places, closure of liquor shops on pay days and important national days, reduction in the number of country liquor shops, removal of liquor shops from populous areas and enhancement of duty on liquor and licence fees. A Prohibition Advisory Committee has been established to consider the question of introducing prohibition by stages.

Uttar Pradesh

Partial prohibition throughout the State—in place of the earlier complete prohibition in only eleven districts—has been effected from December 1, 1962 while complete prohibition is still in force in the three pilgrim centres. Important national days and 57 other days are dry days throughout the State.

The sale of ganja and charas has been prohibited throughout the State and oral consumption of opium has also been banned from July 1, 1959.

West Bengal

Prohibition has not been introduced in any area of the State. Among steps taken to discourage the drinking habit are the declaration of dry days in industrial areas, reduction in the hours of transaction in excise shops and in the grant of licences for retail sale, enhancing the rates of taxation on liquors, etc.

The oral consumption of opium except by addicts and against medical certificate has been completely prohibited from April 1, 1959.

Union Territories

The sale and import of liquor is prohibited in the Andaman and Nicobar Islands.

In Delhi, restrictions on the saleable strength of country liquor, the number of country liquor shops and quota of country liquor for sale, reduction in the quality of retail sale to individuals, reduction in sale hours, increase in the rates of duty, enhanced punishment for repeated prohibition offences and minimum punishment for illicit distillation have been imposed. Advertisements relating to liquor consumption have been banned and various steps have been taken to stop public drinking. Sale of liquor in clubs is restricted to members only, the number of dry days has been increased and duty on all varieties of country liquor has been enhanced. Since April 1, 1959, the supply of opium is available only to addicts on production of medical certificates.

There is total prohibition in the Bilaspur district and sub-divisions of Mahasu, Mandi and Chamba districts, covering nearly one-fourth of the population in Himachal Pradesh. In other areas of the State the quota of country liquor and the number of liquor shops is being reduced gradually from year to year. Drinking in public places has also been banned. Every Tuesday is a dry day. An Advisory Board has been set up to advise the administration, and prohibition committees have been constituted in all the districts.

In Manipur, the issue of licences for local distillation of country liquor has been discontinued since 1958 and special permits are issued to individual tribals for local distillation of liquor on festive and religious occasions. Public drinking and advertisements relating to drinking have been banned and a district prohibition committee has been set up to ensure the successful implementation of the prohibition policy and to seek public co-operation. The oral consumption of ganja, bhang and opium has been prohibited.

In Tripura, excise shops are closed for one day in the week and selling hours have been reduced. Advertisements relating to drinking have been banned. Steps are being taken to remove excise shops away from populous areas. The sale of ganja through government agencies has been completely withdrawn from April 1, 1959.

WELFARE MEASURES FOR CERTAIN MALADJUSTED GROUPS

Social Defence (Care) Programme

The Social Defence (Care) schemes in the Third Five Year Plan, involving an outlay of Rs. 3.58 crores, are aimed at (i) the prevention and treatment of juvenile delinquency, (ii) enforcement of Suppression of Immoral Traffic in Women and Girls Act, (iii) prevention and treatment of beggary and vagrancy, (iv) welfare services in prisons, and (v) probation.

Immoral Traffic in Women and Girls

The Indian Penal Code provides for imprisonment up to 10 years and fines (Sec. 366A, 372 and 373) for the procurement, buying and selling of girls under 18 years for prostitution. Similar penalties have also been prescribed for importing into India girls below 21 years for this purpose. In addition, there is a special Act known as the Suppression of Immoral Traffic in Women and Girls Act, 1956, which provides for the suppression of immoral traffic in women and girls in terms of the International Convention signed at New York in May 1950.

Juvenile Delinquents

Children Acts are in force in the States of Andhra Pradesh, Gujarat, Madhya Pradesh, Madras, Maharashtra, Mysore, Punjab, Uttar Pradesh and West Bengal and all the Union Territories. The Borstal Schools Acts, which are slightly different in scope, are in operation in the States of Andhra Pradesh, Gujarat, Kerala, Madras, Maharashtra, Mysore, Punjab, Uttar Pradesh and West Bengal. The Reformatory Schools Act of 1897 has also been enforced in all the bigger States and some Union Territories.

The problem of juvenile delinquency is mainly the concern of State Governments. The Central Government, however, have sponsored a Care Programme under which the States are given assistance. Under this programme, 40 remand homes, 17 certified schools, 5 borstal schools, 15 boys' clubs, and 5 probation hostels have been established.

Beggars

The Criminal Procedure Code treats vagrants and vagabonds alike and provides penalties under Sections 55(i) (b) and 109 (b). Beggars may be proceeded against under Section 133 as those committing public nuisance. Beggary within railway premises was prohibited by law on February 15, 1941. Special Acts have been passed by most of the States to prohibit begging in public places. In others, the municipal and police Acts provide measures against begging. To deal effectively with persons who kidnap children for the purpose of exploiting them for begging, the Indian Penal Code (Amendment) Act, 1959, was enacted. This Act makes kidnapping or obtaining custody of a minor and the maiming of minors for the purpose of begging specific offences and provides for deterrent punishment, which may extend to life imprisonment where children are maimed.

There are institutions in the States for the custody, care and assistance of beggars in their rehabilitation. Eighteen certified institutions with a total capacity for 2,000 beggars exist in Maharashtra and Gujarat. West Bengal has 8 beggar homes with accommodation for 2,050. There are 7 similar institutions in Madras, 8 including 3 relief settlements in Kerala and 3 in Delhi. There is a beggar home each in the States of Uttar Pradesh, Madhya Pradesh and Mysore. A novel type of vagrant home-cum-training

centre is in existence in New Delhi in which the inmates take part in the management of the home. Under the Central Care and After-Care Programmes assistance is available for the setting up of beggar homes, appointment of welfare officers in prisons for maintaining liaison between the prisoner and his family and creation of State homes for the after-care of discharges from correctional and non-correctional institutions.

Central Bureau of Correctional Services

The Central Bureau of Correctional Services was established in August 1961. The main functions of the Bureau are to co-ordinate and develop a uniform policy, to standardise the collection of statistics on a national basis, to exchange information with foreign Governments and the United Nations agencies and to promote research, training and studies and surveys in the field of prevention of crime and treatment of offences. A quarterly journal *Social Defence* is being published by the Bureau.

CENTRAL SOCIAL WELFARE BOARD

The Central Social Welfare Board was set up in August 1953. Its functions, as defined in the Resolution of Government setting up the Board, are to survey the needs and requirements of social welfare organisations, evaluate their programmes and projects, co-ordinate the assistance given by various Central Ministries and State departments, promote the development of voluntary organisations in the areas where no such organisations exist, and render financial assistance to deserving agencies. All welfare schemes sponsored by the Board have been implemented through the utilisation of voluntary organisations as the principal agencies.

Social Welfare Advisory Boards have been constituted in different States to decentralise the activities of the Board and to enable it to maintain continuous contact with the aided institutions for ensuring the most effective direction of their efforts.

Since its inception till the end of December 1963, the Board had sanctioned grants amounting to Rs. 707 lakhs. In 1961, the grants-in-aid programme was decentralised and State Boards were delegated powers to sanction and release grants up to a certain limit in the case of yearly grants.

Welfare Extension Projects (Rural)

A scheme of rural welfare, known as Welfare Extension Projects, was sponsored directly by the Board in August 1954. Each of these projects covers about 25 to 30 villages and a population of about 20,000. The programme and activities of these projects comprise balwadis (community creches and pre-basic schools), maternity and infant health services (including those for the handicapped and the delinquent), literacy and social education for women, arts and crafts centres and recreational activities.

A project implementing committee, composed mainly of women social workers, is responsible for the formulation and execution of the programme in each welfare extension area. Each project area is generally divided into 5 centres of 5 villages each; each centre is with a dai and a craft instructor and in charge of a trained gram sevika. At the project level are a mukhya sevika and a midwife.

Up to the end of October 1960, 418 such projects with 2,027 centres covering a population of 79.48 lakhs in 10,499 villages were established. From 1961-62 onwards, the projects have been handed over to Mahila Mandals and local voluntary welfare organisations, each of which is given a suitable grant.

Since April 1957, the projects have been extended to community development blocks. Projects of a co-ordinated pattern, as distinguished from the original pattern, have been started in these areas. Each project covers

about 100 villages and a population of about 60,000 to 70,000. There were 274 such projects at the end of 1963.

Welfare Extension Projects (Urban)

The activities undertaken in these projects, meant to provide community welfare centres for residents of slum areas, include starting of creches, balwadis, ante-natal and post-natal advisory services, infant health centres, hobby clubs, vocational guidance, training in arts and crafts for women, and referral and placement services for the handicapped. Ninety-eight voluntary institutions running such projects in urban areas covering a population of 6.75 lakhs were given grants amounting to Rs. 32.50 lakhs till the end of December 1963.

Holiday Homes for Children

Five hundred and five batches of 50 children each benefited from grants amounting to Rs. 14.70 lakhs given as assistance for organising holiday camps at hill stations and summer resorts for children coming from lower income groups, till December 1963. The scheme is being co-ordinated by the Indian Council of Child Welfare. Powers for sanctioning grants have now been delegated to State Boards.

Night Shelters

Forty-eight institutions are running night shelters in different States to provide temporary accommodation for the shelterless in big industrial cities. A sum of Rs. 5.01 lakhs was given as assistance to them. The co-ordination work of this scheme has been entrusted to the Bharat Sevak Samaj.

Socio-Economic Programme

A scheme of setting up a number of production units with the assistance of the Ministry of Industry and its industrial boards and the Khadi Commission has been initiated in order to provide needy women and handicapped persons with gainful employment. The different types of units established so far and the workers employed therein are given below :

	No. of units	No. of workers
(a) Production units		
(i) Units of small industries	26	1,170
(ii) Ancillary units of large industries	3	99
(iii) Hand crafts units	10	280
(iv) Units attached to State after-care homes	26	2,600
(v) Handloom-cum-production units	19	804
(b) Training of craft instructors		
(i) Ambar Charkha trained	380	
(ii) Handicrafts Teacher's Training		
Trained	400	
Under training	120	

During the Third Plan period it is proposed to sanction about 265 units which will provide employment to about 12,000 women.

Training of Tribal Women as Multi-purpose Workers

Three training centres at Dohad (Gujarat), Dumka (Bihar) and Imphal (Manipur) offer a two- to three-year course in general education and training in welfare activities.

Condensed Course for Adult Women

Adult women in the 20-35 age group are trained under this programme for recognised examinations. They later become eligible for training courses for craft teachers, bal sevikas, gram sevikas, nurses, mid-wives, family planning workers, etc. Six hundred and forty-one courses were organised till the end of December 1963. Six thousand four hundred and

thirty-five women were trained under this programme. Another about 7,300 are attending these courses all over the country.

Social and Moral Hygiene and After-Care Programme

The Social and Moral Hygiene and After-Care Programme, undertaken on the recommendations of the Advisory Committee on After-Care Programmes and of the Social and Moral Advisory Committee, is aimed at the after-care and rehabilitation of rescued women and adults and children discharged from correctional, non-correctional and care institutions. The programme is implemented by the State Governments with Central assistance, the Central Social Welfare Board and the State Social Welfare Boards being associated with it in an advisory capacity. Till March, 1964, 91 District Shelters and 50 State Homes under this programme had been established in the country.

Child Welfare

Provision has been made in the Third Five Year Plan for setting up demonstration projects for integrated child welfare services, aiming at the all-round development of children up to the age of 16.

The Board has intensified its child welfare programmes and taken up new schemes based on the recommendations of the Committee on Child Care, set up in 1960. The programmes to be developed include organisation of (i) model homes for children on cottage basis providing family atmosphere, (ii) new balwadis and improvement of existing balwadis in community development blocks and at construction sites and demonstration projects of integrated child welfare services, (iii) foster care of foundlings, orphans, and destitute children, (iv) integrated pre-school projects, providing services in the field of health, nutrition education, recreation and training for children in urban areas, and (v) pre-schools for physically and mentally handicapped children. The programme also includes publication of pictorial literature for children of pre-school age and for the guidance of child welfare workers, standardisation of educational and recreational equipment and material required for pre-schools and training of child welfare workers.

Border Areas Programmes

The Board has decided to undertake welfare work in border areas of the country. As an initial step, welfare extension projects providing maternity services, craft training, social education and balwadi education have been started in the border areas of NEFA, Leh in Ladakh, Kinnaur in Himachal Pradesh and Lahaul in Punjab.

Training camps for local people have also been organised in the districts of Banaskantha and Kutch in Gujarat.

Training-cum-Production Centres

The Social Welfare and Rehabilitation Directorate runs 19 training-cum-production centres in different parts of Delhi and has so far trained 24,278 women in various crafts. Apart from imparting training, these centres also employ women wage-earners in various crafts.

Homes for Displaced Persons

Homes and infirmaries, etc., were established to provide maintenance and shelter to destitute and displaced persons from Pakistan, particularly unattached women and aged and infirm persons with or without dependants. There are at present about 50 homes and infirmaries with a population of about 50,000 inmates. Besides these, about 1,000 displaced orphan children are being maintained in 32 children's institutions in West Bengal and about 3,000 persons are receiving cash doles outside homes.

Rehabilitation assistance in the form of loans and outright grants is also given to inmates of homes to enable them to stand on their own feet as soon as they become rehabilitable either through training or attainment of maturity.

RELIEF AND REHABILITATION

Displaced Persons from East Pakistan

Migration to India of members of the minority community in East Pakistan which began in 1946 continued unabated till 1956 by which time about 42 lakh displaced persons had migrated to India. Of this, about 7 lakh families have so far been rehabilitated and an expenditure of nearly Rs. 203 crores incurred till the end of 1963-64, for their relief and rehabilitation.

Consequent upon the communal disturbances in East Pakistan in January 1964, a fresh exodus of the members of minority communities has started. From January to May 18, 1964 about 3.87 lakh refugees had migrated to India from East Pakistan. Of these, about 2.26 lakh have come to West Bengal, 1.14 to Assam and 47,000 to Tripura.

The influx continues unabated and on an average about 5,000 persons are coming to India from East Pakistan every day. As the problem is assuming gigantic proportions, the following State Governments have agreed to rehabilitate 69,000 families as under : Maharashtra (10,000), Madhya Pradesh (25,000), Orissa (30,000), Andhra Pradesh (2,000), Bihar (1,000), and Madras (1,000).

The Governments of Uttar Pradesh, Mysore and Gujarat will also help in the rehabilitation of the new migrants.

Dandakaranya Scheme

An area of 30,052 square miles in selected areas in Bastar district of Madhya Pradesh and Koraput and Kalahandi districts of Orissa has been reclaimed under the Dandakaranya Scheme for resettling a sizeable displaced population from East Pakistan. The Dandakaranya Development Authority was set up in September 1958. Eighty-six thousand acres have been fully reclaimed and 6,487 families were moved to the area up to the end of October 1963. Six thousand four hundred and eighty-seven families have been moved to village sites. Mixed farms at Umarkote and Paralkote and a central horticulture farm at Dumriput have been set up and crops and vegetables grown. So far 38,000 acres of land has been brought under cultivation. A poultry farm was also started at Mana. The fisheries scheme has been making steady progress. Malaria has been eradicated from the area of settlement, medical facilities have been provided and 133 primary and 15 secondary schools and 22 adult schools imparting education to about 9,800 students have been established.

Displaced Persons from West Pakistan

Forty-seven lakh and forty thousand persons displaced from West Pakistan migrated to India. A sum of Rs. 200 crores has been spent for their relief and rehabilitation. Payment of compensation has almost been completed. A sum of Rs. 184 crores has been paid to 5.05 lakh claimants.

Resettlement of Kashmiri Displaced Persons

In 1959, the Government of India decided to give rehabilitation assistance to the Kashmiri displaced persons in the form of an 'ex gratia' payment which comes to Rs. 1,000 per family settled on agricultural lands and Rs. 3,500 for those settled elsewhere than on land. Up to December 31, 1963, payment of grants in 12,000 cases involving payment of Rs. 1.83 crores was made.

OTHER KINDS OF RELIEF

Emergency Relief Organisation

A country-wide organisation known as the Emergency Relief Organisation to provide relief in times of floods, famines, earthquakes, etc., has been set up in almost all the States and Union Territories. The Organisation will ensure that :

- (i) relief operations are conducted according to plans drawn up ahead of an emergency and, as far as possible, by personnel well trained in conducting such operations;
- (ii) emphasis is laid on the principle of self-help so that assistance from outside the affected area is reduced to the minimum;
- (iii) each of the interested social welfare agencies is allotted a definite role to play; and
- (iv) the district and local authorities, the State Governments and the Government of India take upon themselves the responsibility for proper integration of activities within their respective spheres.

The Organisation, when fully established, will function at the Central, State and district levels. The Central organisation will implement the emergency relief policy of the Government, co-ordinate the efforts of the States and provide such relief services and supplies as can be arranged only by the Government of India.

As part of the Central Emergency Relief Organisation, a training institute has been set up at Nagpur. The institute lays down a basic pattern of training in emergency relief operations for the country as a whole and provides a source of supply of trained personnel in adequate numbers not only for instructional purposes but also for manning the various relief services envisaged under the scheme.

Prime Minister's National Relief Fund

Since November 1947, when the Prime Minister's National Relief Fund was founded, up to the end of March 1964 public contributions to the Fund amounted to about Rs. 2.53 crores. Against this over Rs. 2.46 crores was utilised in providing relief to people affected by natural calamities such as earthquakes, floods, cyclones, droughts, famines and fire. Relief was also given in the early stages to displaced persons from Pakistan, and after the national emergency to people affected in border areas.

CHAPTER X

SCHEDULED AND BACKWARD CLASSES

The Constitution prescribes protection and safeguards for Scheduled Castes, Scheduled Tribes and other Backward Classes, either specifically or by way of general rights of citizens, with the object of promoting their educational and economic interests and of removing certain social disabilities the Scheduled Castes were subject to. These are :

- (i) the abolition of "Untouchability" and the forbidding of its practice in any form (Art. 17);
- (ii) the promotion of their educational and economic interests and their protection from social injustice and all forms of exploitation (Art. 46);
- (iii) the throwing open of Hindu religious institutions of a public character to all classes and sections of Hindus (Art. 25);
- (iv) the removal of any disability, liability, restriction or condition with regard to access to shops, public restaurants, hotels and places of public entertainment, the use of wells, tanks, bathing ghats, roads and places of public resort maintained wholly or partly out of State funds or dedicated to the use of the general public (Art. 15);
- (v) the right to practise any profession or carry on any occupation, trade or business (Art. 19);
- (vi) the forbidding of any denial of admission to educational institutions maintained by the State or receiving aid out of State funds (Art. 29);
- (vii) the obligation of the State to consider their claims in the making of appointments to public services and reservation for them in case of inadequate representation (Arts. 16 and 335);
- (viii) special representation in Parliament and the State Legislatures for a period of twenty years (Arts. 330, 332 and 334);
- (ix) the setting up of advisory councils and separate departments in the States and the appointment of a Special Officer at the Centre to promote their welfare and safeguard their interests (Arts. 164, 338 and Fifth Schedule); and
- (x) special provision for the administration and control of scheduled and tribal areas (Art. 244 and Fifth and Sixth Schedules).

According to 1961 Census, the population of the Scheduled Castes and the Scheduled Tribes is 6.45 crores and 2.99 crores respectively.

The State-wise distribution of the Scheduled Castes and Tribes according to the Scheduled Castes and Scheduled Tribes Lists (Modification) Order, 1956, the Constitution (Jammu and Kashmir) Scheduled Castes Order, 1956, the Constitution (Andaman and Nicobar Islands) Scheduled Tribes Order, 1959, the Constitution (Dadra and Nagar Haveli) Scheduled Castes Order, 1962, and the Constitution (Dadra and Nagar Haveli) Scheduled Tribes Order, 1962, is shown in the following table.

TABLE 40
POPULATION OF SCHEDULED CASTES AND SCHEDULED TRIBES
(1961 Census)

State/Union Territory	Scheduled Castes	Scheduled Tribes
INDIA	6,45,11,114	2,98,83,470
States		
Andhra Pradesh	49,73,616	13,24,368
Assam	7,32,756	20,68,364
Bihar	65,36,875	42,04,770
Gujarat	13,67,255	27,54,446
Jammu and Kashmir	2,68,530	—
Kerala	14,22,057	2,07,996
Madhya Pradesh	42,53,024	66,78,410
Madras	60,72,536	2,52,646
Maharashtra	22,26,914	23,97,159
Mysore	31,17,232	1,92,096
Orissa	27,63,858	42,23,757
Punjab	41,39,106	14,132
Rajasthan	33,59,640	23,09,447
Uttar Pradesh	1,54,17,245	—
West Bengal	69,50,726	20,63,883
Union Territories and Other Areas		
Andaman and Nicobar Islands	—	14,122
Dadra and Nagar Haveli	985	51,261
Delhi	3,41,555	—
Himachal Pradesh	3,69,916	1,08,194
Laccadive, Minicoy and Amindivi Islands	—	23,391
Manipur	13,376	2,49,094
Nagaland	126	3,43,697
North-East Frontier Tract	—	5,042
Pondicherry	56,861	—
Tripura	1,19,725	3,60,070

MEASURES TO ERADICATE UNTOUCHABILITY

The Untouchability (Offences) Act, 1955

This Act, which came into force on June 1, 1955, provides penalties for preventing a person, on the ground of untouchability, from entering a place of public worship, offering prayers therein or taking water from a sacred tank, well or spring. Penalties are also provided for enforcing all kinds of social disabilities, such as denying access to any shop, public restaurant, public hospital or educational institution, hotel or any place of public entertainment; the use of any road, river, well, tank, water tap, bathing ghat, cremation ground, sanitary convenience, *dharamshala*, *sarai* or *musafirkhana* or utensils kept in such institutions and hotels and restaurants. The Act prescribes penalties for enforcing occupational, professional or trade disabilities, or disabilities in the matter of enjoyment of any benefit under a charitable trust, in the construction or occupation of any residential premises in any locality or the observance of any social or religious usage or ceremony.

The Act similarly lays down penalties for refusing to sell goods or render services to a Harijan because he is a Harijan; for molesting, injuring or annoying a person or organising a boycott of, or taking any part in the excommunication of a person who has exercised the rights accruing to him as a result of the abolition of untouchability.

Higher penalties have been prescribed for subsequent offences. For the purposes of awarding punishments, incitement or abetment of the offence has been treated in the same manner as the commission of the offence. The onus of proving innocence has been thrown on the accused. The offences under this Act are cognisable and compoundable.

Campaign against Untouchability

Since 1954 the Government of India have been giving financial support to the movement to eradicate untouchability. Both official and non-official agencies are being utilised for this purpose. The State Governments have instructed their district officers and other officials, who deal with the public, to stress the need for and the urgency of doing away with this evil. "Harijan Days" and "Harijan Weeks" are observed to focus public attention and enlist people's co-operation in the eradication of untouchability. Most of the States have appointed small committees to enforce, where necessary, the provisions of the Untouchability (Offences) Act, 1955. Publicity media, such as books, pamphlets, handbills and audio-visual aids have also been pressed into service.

The assistance and co-operation of voluntary organisations, such as the Harijan Sevak Sangh, the Bharatiya Adimjati Sevak Sangh, the Bharatiya Depressed Classes League, the Bharat Dalit Sevak Sangh, Hind Sweepers' Sewak Samaj, the Servants of India Society, the Tata Institute of Social Sciences and Iswar Saran Ashram have also been obtained. A sum of Rs. 61,50,746, of which Rs. 14,77,200 came from the Centre, was given as grants-in-aid to these organisations during the First Plan period. Grants amounting to Rs. 68 lakhs were sanctioned during the Second Plan period, and a sum of Rs. 1.20 crores has been earmarked in the Third Plan for financial assistance to non-official agencies.

REPRESENTATION IN LEGISLATURES

Under Articles 330, 332 and 334 of the Constitution, seats, proportionate as far as possible to their population in the States, have been reserved for the Scheduled Castes and Tribes in the Lok Sabha and the State Vidhan Sabhas for a period of twenty years after the inauguration of the Constitution. Table 41 gives details of the representation in Parliament and the State Legislatures.

REPRESENTATION IN THE SERVICES

The manner in which the State carries out its obligation to reserve posts for Scheduled Castes and Tribes in the public services in case of inadequate representation and to consider their claims consistent with the maintenance of efficiency of administration, has been left outside the purview of obligatory consultation with Public Service Commissions [Art. 320(4)].

Twelve and a half per cent of the vacancies for which recruitment is made by open competition on an all-India basis and 16-2/3 per cent of the vacancies to which recruitment is made otherwise are reserved for the Scheduled Castes. For the Scheduled Tribes, the reservation is five per cent in both cases. Reservations in direct recruitment to Classes III and IV posts which normally attract candidates from a locality or region are fixed in proportion to the population of Scheduled Castes and Scheduled Tribes in the respective States and Territories.

Reservation is also made at 12½ per cent of the vacancies for Scheduled Castes and 5 per cent of the vacancies for Scheduled Tribes in promotions by (i) selection or (ii) on the results of the competitive examinations limited to departmental candidates, in grades or services in Classes III & IV to which there is no direct recruitment whatever.

To facilitate their adequate representation, concessions such as (i) exemption in age-limits, (ii) relaxation in the standard of suitability and of qualifications, and (iii) selection, subject to fulfilling the minimum standard of efficiency have been provided for. If no suitable Scheduled Caste or Scheduled Tribe candidates are available for the reserved posts, they are to be treated as unreserved and an equal number of reservations are carried

TABLE 41
SEATS RESERVED FOR SCHEDULED CASTES AND SCHEDULED TRIBES
IN PARLIAMENT AND STATE LEGISLATURES

State/Union Territory	In Parliament			In State Legislatures		
	Total number of seats in the House of the People	Scheduled Castes	Scheduled Tribes	Total number of seats in the Legislative Assembly	Scheduled Castes	Scheduled Tribes
States						
Andhra Pradesh	43	6	2	300	43	11
Assam	12	1	2*	105	5	23
Bihar	53	7	5	318	40	32
Gujarat	22	1	3	154	11	21
Jammu & Kashmir	6	—	—	75†	—	—
Kerala	18	2	—	126	11	1
Madhya Pradesh	36	5	7	288	43	54
Madras	41	7	—	206	37	1
Maharashtra	44	6	2	264	33	14
Mysore	26	3	—	208	28	1
Orissa	20	4	4	140	25	29
Punjab	22	5	—	154	33	—
Rajasthan	22	3	2	176	28	20
Uttar Pradesh	86	18	—	430	89	—
West Bengal	36	6	2	252	45	15
Union Territories						
Delhi	5	1	—	—	—	—
Himachal Pradesh	4	1	—	—	—	—
Manipur	2	—	1	—	—	—
Tripura	2	—	1	—	—	—
TOTAL	500	76	31	3,196	471	222

forward to two recruitment years. On no occasion, however, the number of reserved vacancies is to exceed 45 per cent of the total vacancies.

To give proper effect to the reservation decided upon, model rosters of 40 posts each have been prescribed for recruitment by open competition and otherwise. If the vacancies in a Service or Cadre are too few for the purpose, all corresponding posts are to be grouped together. Annual reports are required to be submitted by the employing authorities for scrutiny by the Government. To bring about a greater awareness for ensuring effective implementation of the special representation orders, liaison officers have been appointed in the different Ministries of the Union Government. Arrangements have also been made for intensive training and coaching facilities at certain educational institutions to enable Scheduled Castes and Tribes candidates to compete on merit for all-India services. Some of the State Governments have also drawn up rules for the reservation of posts for these classes, and steps have been taken to increase their representation in State services.

Three lakh thirty two thousand five hundred and sixty-three persons belonging to Scheduled Castes and Scheduled Tribes were employed in the Government of India on January 1, 1962.

*One seat reserved for the Autonomous Districts in Assam.

†Excludes 25 seats for Pakistan-occupied areas of the State which are kept in abeyance pending the return of those areas to the Indian Union.

ADMINISTRATION OF SCHEDULED AND TRIBAL AREAS

Autonomous Tribal Areas of Assam

In pursuance of the provisions of the Sixth Schedule, one Regional Council and five District Councils have been set up in the districts of the United Khasi-Jaintia Hills, Garo Hills, Mizo Hills, North Cachar Hills and Mikir Hills. Each of the District Councils consists of not more than 24 members, three-fourths of them being elected by adult suffrage. The Councils possess wide legislative and rule-making powers as well as certain financial and taxation powers.

Tribes Advisory Councils in Other States

The Fifth Schedule to the Constitution provides for the setting up of a Tribes Advisory Council in each of the States having Scheduled Areas and, if the President so directs, for constituting such Councils in States which have Scheduled Tribes but no Scheduled Areas. Tribes Advisory Councils have been set up so far in the States of Andhra Pradesh, Assam, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Madras, Orissa, Punjab, Rajasthan and West Bengal. These Councils advise the Governors on such matters concerning the welfare of the Scheduled Tribes and development of the Scheduled Areas as may be referred to them. Advisory Boards for the Scheduled Tribes have been set up in Kerala and Mysore to advise the State Governments on matters pertaining to their welfare and advancement. Tribes Advisory Committees have also been formed in the Union Territories of Himachal Pradesh, Manipur, Tripura, Andaman and Nicobar Islands and Laccadive, Minicoy and Amindivi Islands.

WELFARE AND ADVISORY AGENCIES

Commissioner for the Scheduled Castes and Scheduled Tribes

A Special Officer has been appointed by the President under Article 338 of the Constitution to (i) investigate all matters relating to the safeguards for the Scheduled Castes and Scheduled Tribes provided under the Constitution, and (ii) report to the President on the working of these safeguards. There are seventeen Assistant Commissioners to assist the Commissioner.

Central Advisory Boards

To associate members of Parliament and public workers with matters pertaining to the development of Tribal Areas and the well-being of the Scheduled Tribes and Scheduled Castes, two Central Advisory Boards—one for Tribal Welfare and the other for Harijan Welfare—have been constituted. These Boards advise the Government of India on all matters relating to the welfare of these classes. They are also expected to assess the requirements of the tribal people in Scheduled and other Tribal Areas, formulate schemes for their welfare, periodically review the working of sanctioned schemes and evaluate the benefits derived from them for suggesting improvements.

Welfare Departments in the States

The proviso to Article 164(1) of the Constitution requires that in the States of Bihar, Madhya Pradesh and Orissa, Welfare Departments in charge of a Minister be set up. Welfare Departments have been set up in these States as well as in Andhra Pradesh, Assam, Gujarat, Jammu and Kashmir, Kerala, Madras, Maharashtra, Mysore, Punjab, Rajasthan, Uttar Pradesh, West Bengal, Himachal Pradesh, Manipur and Tripura.

WELFARE SCHEMES

Under Article 339(2) of the Constitution the Union Government can give directions to States in the formulation and execution of schemes for

the welfare of the Scheduled Tribes in the States. Under Article 275(1), the Centre is required to give grants-in-aid to the States for approved schemes of welfare and for improving the tone of administration in Scheduled Areas.

Educational Facilities

Measures to provide increased educational facilities have been taken, the emphasis being on vocational and technical training. The concessions include free tuition, stipends, scholarships and the provision of books, stationery and other equipment. Mid-day meals are also provided in many places.

The Government of India instituted a scheme for grant of scholarships to the Scheduled Castes in 1944-45. This benefit was extended to the Scheduled Tribes in 1948-49 and other Backward Classes in 1949-50. The scheme has been decentralised with effect from 1959-60.

The Central Government's scheme to award scholarships to deserving students from these classes for studies in foreign countries came into force in 1953-54. From 1955-56 the number of such scholarships was increased to 12, four for each of the three groups. Tourist class sea passages are given to students who receive foreign scholarships without travel grants. Overseas scholarships to students belonging to backward communities are also awarded by the State Governments of Assam, Bihar, Gujarat and Maharashtra.

Seventeen and a half per cent of the merit scholarships granted by the Centre to deserving students of the lower income groups for studies in institutions which are members of the Indian Public School Conference, are reserved for backward communities. Some of the State Governments offer similar scholarships. Some public schools also award scholarships to deserving backward class students. Reservation of seats, lowering of minimum qualifying marks and raising of the maximum age limit for admission of members of these classes in all technical and educational institutions are among other steps recommended by the Union Government to all educational authorities.

Economic Opportunities

Of a tribal population of 225 lakhs (according to 1951 Census), about 26 lakh persons practise shifting cultivation annually over an area of 22,55,816 acres, the total area used so far for shifting cultivation being five times this figure. The problem is in its acute form in the States of Andhra Pradesh, Assam, Bihar, Madhya Pradesh and Orissa and the Union Territories of Manipur and Tripura. A scheme to control shifting cultivation was started during the First Plan period and 9,604 acres of land have been so far allotted for the settlement of shifting cultivators in Assam. Ten colonisation schemes have been started in Andhra Pradesh and nearly 1,548 families in Bihar, 366 in Madhya Pradesh, 2,990 in Orissa and 13,413 in Tripura have been settled under the scheme.

Andhra Pradesh, Bihar, Gujarat, Madras, Maharashtra, Orissa and Uttar Pradesh have launched schemes to improve irrigation facilities to reclaim waste land and to distribute it among members of the Scheduled Castes and Scheduled Tribes. In addition, facilities for the purchase of livestock, fertilisers, agricultural implements, better seeds, etc., are also being extended to them. Some States have set up demonstration farms for training them in methods of scientific cultivation. Cattle breeding and poultry farming are being encouraged among these people.

The Governments of Andhra Pradesh, Assam, Bihar, Gujarat, Maharashtra, Uttar Pradesh and West Bengal are encouraging the development of cottage industries through loans, subsidies and training centres. Multi-purpose co-operative societies which provide credit in cash and in

kind to the Scheduled Castes and Tribes have also been established in Andhra Pradesh, Bihar, Madras, Mysore, Orissa, Uttar Pradesh and West Bengal. In some States, such as Maharashtra and Andhra Pradesh, contracts for exploiting forest produce are being given to the Scheduled Tribes through labour co-operative societies.

Legislation has been enacted in almost all the States to extend relief to the indebted, including those belonging to the Scheduled Castes and Scheduled Tribes. Measures for the abolition of their debt bondage have been taken in Orissa and Bihar. Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Orissa and West Bengal have enacted tenancy laws to ensure security of land tenure of the Scheduled Tribes.

Other Welfare Schemes

Other welfare schemes include the grant of house sites free or at nominal cost, assistance by way of loans, subsidies and grants-in-aid to local bodies for the construction of houses for their Harijan employees and monetary assistance to co-operative building societies specially for the benefit of the Scheduled Castes and Scheduled Tribes. A scheme of legal aid to Scheduled Castes is now in operation in many States.

Tribal Research Institutes

Tribal research institutes, which undertake intensive studies of tribal arts, culture and customs, have been set up in Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Orissa, Rajasthan and West Bengal. The Gauhati University initiated some years ago the study of the social and cultural life of the tribes in Assam. In Maharashtra and Gujarat, tribal research is being conducted by the Anthropological Society of Bombay, the Gujarat Research Society, Gujarat Vidyapith and the University of Bombay. In West Bengal, the Cultural Research Institute has produced reports on several aspects of tribal life in the State. The Department of Anthropology, Government of India, has completed two studies on the inter-ethnic relationship and social mobility among some tribal and caste groups in the country and selected material traits in 148 districts all over India. Studies in the culture and language of the people of NEFT are being undertaken. Madhya Pradesh Institute has completed an evaluation of co-operative societies and five districts of the Mahakosal region and is now engaged in, among other things, (a) the study of the impact of industrialisation on the social, cultural and economic life in the coal mines of Chindwara district; (b) the study of the problem and extent of shifting cultivation in Mandla, Surguja, Bastar and Raigarh districts; (c) assessing relative importance of minor forest produce in tribal economy; (d) the study of housing and water supply conditions. The Bihar Institute has also completed studies on a tribe in Santhal Parganas. The Bharatiya Lok Kala Mandal, Udaipur, is a pioneer non-official organisation which has conducted cultural surveys of tribes in the former Madhya Bharat State and in Rajasthan.

Tribal Development Blocks

During the Second Plan period, under a Central programme for special multi-purpose tribal blocks aimed at intensive development in tribal areas on the general pattern of community development with modifications to suit tribal conditions, 43 development blocks were started with an outlay of Rs. 27 lakhs per block in the first stage of five years and Rs. 10 lakhs in the second stage of another five years. A committee headed by Verrier Elwin examined the working of these blocks. Four hundred and fifty such blocks, each involving an outlay of Rs. 22 lakhs in the first stage and Rs. 10 lakhs in the second stage, are to be started during the Third Plan period. A normal block will have a coverage of about 200 sq. miles and 25,000 people of whom at least 66-2/3 per cent are tribals.

CHAPTER XI

MASS COMMUNICATION

BROADCASTING

All India Radio has a network of 33 principal stations and 11 auxiliary centres covering all the important cultural and linguistic regions of the country. The stations are grouped into four zones as follows :

North : Delhi, Lucknow, Allahabad, Patna, Jullundur, Jaipur, Simla, Bhopal, Indore and Ranchi.

West : Bombay, Nagpur, Ahmedabad, Poona, Rajkot and Goa.

South : Madras, Tiruchirapalli, Vijayawada, Trivandrum, Kozhikode, Hyderabad, Bangalore and Dharwar.

East : Calcutta, Cuttack, Gauhati, Kurseong, Kohima, Imphal and Port Blair.

There are two stations of Radio Kashmir, one at Srinagar and the other at Jammu. The auxiliary centres are located at Ajmer, Bikaner, Cuddapah, Raipur, Sambalpur, Sangli, Siliguri, Tirunelveli, Trichur, Varanasi and Visakhapatnam. The number of transmitters, studio centres and receiving centres on March 31, 1964, was 93, 38 and 42, respectively.

The Medium-Wave Plan, envisaging the installation of 63 additional transmitters which when completed will bring 77 per cent of the population and 61 per cent of the total area of the country within the listening range of medium-wave programmes as against 55 and 37 per cent respectively in the pre-plan period, has registered appreciable progress. Medium-wave Vividh Bharati centres have now been set up at Bangalore, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Indore, Jaipur, Kanpur, Lucknow, Madras, Nagpur, Patna, Poona, Rajkot, Tiruchirapalli and Vijayawada. Besides adding two high-power short-wave transmitters to the Home Services, two more high-power short-wave transmitters are under installation for strengthening the external services.

Programme Composition

Music programmes comprise nearly 50 per cent of all the programmes broadcast by All India Radio. News, news-reels, talks, discussions, interviews, dramas, features, etc., cover a wide range of subjects. The National Programme of Talks given by well-known personalities in arts, sciences and literature is broadcast every Wednesday and is relayed by all stations. The composition and duration of the Home Services programmes, including Vividh Bharati, during 1963 are shown below :

TABLE 42
COMPOSITION OF HOME PROGRAMMES (1963)

Type of Programme	Duration		Approx. percentage
	Hrs.	Mts.	
Regional Services			
Indian music			
Classical (vocal)	14,630	57	11.1
Classical (instrumental)	11,030	20	8.4
Folk (vocal)	2,264	35	1.7
Folk (instrumental)	95	15	0.1
Light (vocal)	14,914	30	11.4
Light (instrumental)	1,941	43	1.5
Devotional	6,814	11	5.2
Film	4,352	35	3.3

TABLE 42 (Concl'd).

Type of Programme	Duration		Approx percentage
	Hrs.	Mts.	
Western music	3,420	00	2.6
Talks, discussions, etc.	7,981	07	6.1
Dramas and features	7,596	23	5.8
News	28,797	13	21.9
Special Broadcasts			
Religious	100	48	20.9
Children	2,070	46	
Women	2,553	03	
Rural	9,610	09	
Industrial	2,718	54	
Armed Forces	1,347	36	
Tribal	2,129	12	
Educational	2,888	43	
Publicity	2,070	39	
Others	1,947	14	
TOTAL	1,31,276	11	100.0
Vividh Bharati	41,488	16	
GRAND TOTAL	1,72,764	27	

Vividh Bharati

This all-India light variety programme completed its sixth year in October 1963, and is now broadcast for 11½ hours on week days and 12½ hours on Sundays and principal festival days. The Saturday programmes include a special transmission from 9.45 to 11 p.m., providing an alternative to the National Programme of Music for such listeners as may not be interested in classical music. Besides being broadcast over two powerful short-wave transmitters from Bombay and Madras, some selected programmes are also relayed by the Goa and Gauhati stations. In addition, Vividh Bharati programmes are now available on the medium-wave from 15 centres in various parts of the country.

Special Audience Programmes

Rural broadcasts deal with all aspects of rural life and provide useful information to villagers through dialogues, discussions, plays, news, talks, weather reports, etc. Problems concerning agriculture, education, health and hygiene are dealt with by experts. At present 30 stations of AIR broadcast rural programmes in 11 languages and 48 dialects for nearly 30 hours a day. Under the Central Government's Subsidy Scheme, about 85,000 community sets have been supplied to various State Governments for installation in rural areas.

A country-wide scheme of Radio Rural Forums, providing listening-cum-discussion-cum-action group programmes in which a two-way contact between the broadcaster and the listener is established, was launched on November 17, 1959. These are organised in villages which regularly discuss the weekly broadcasts and send their criticisms and suggestions to the radio stations concerned. By the end of 1963, over 8,000 such forums were functioning in the different States.

Educational programmes for schools are at present broadcast from 23 stations, for a duration of 20-30 minutes on four to six days in a week. At the end of 1963, 22,000 schools were registered with AIR for these broadcasts.

Programmes addressed to students of universities consist of talks and discussions on subjects of academic interest. Inter-university contests in

group discussions and radio plays are held annually in Hindi, English and other languages. Close liaison is maintained with the universities through listening forums set up to build up sustained interest in these programmes.

Special programmes for women and children are broadcast from all stations generally twice and from some stations thrice a week for 30 to 45 minutes per programme. In the women's programmes, information on house-keeping, child care, nutrition, mental health, etc., is given. Talks, dialogues, short stories, choruses, plays, features and quiz programmes are broadcast in programmes meant for children. Formation of listening groups both for women and children is being encouraged. At the end of 1963, there were well over 1,465 women's listening clubs and 2,170 children's listening clubs in India.

Programmes for industrial workers are broadcast at convenient timings from Delhi, Madras, Bombay, Calcutta, Ahmedabad, Lucknow, Vijayawada, Tiruchi and Hyderabad. They are meant to provide information and entertainment to industrial workers and in particular to acquaint them with the laws and problems of industrial establishments. A programme for tea garden workers and their families in Assam is also being broadcast from Gauhati and Kurseong.

Programmes for the armed forces are broadcast daily from Delhi, Srinagar, Jammu, Gauhati and Siliguri and in the Vividh Bharati service. Apart from light music, these include news, news-talks and short skits.

AIR broadcasts programmes in nearly 82 tribal dialects of which the largest number (30) is represented in the programmes from the Gauhati station. Such programmes are also broadcast from Ahmedabad, Baroda, Bangalore, Bhopal, Calcutta, Cuttack, Imphal, Indore, Jaipur, Kohima, Kurseong, Patna, Ranchi, Simla, Trivandrum and Vijayawada.

Five Year Plan Publicity

Publicity for the Plan aims at bringing home to listeners the theme of helping themselves to help the Plan. In addition to the general programmes in which the message of the Plan is carried, special audience programmes emphasise the various aspects of planned progress. During 1963, more than 6,500 such programmes were broadcast.

Programme Exchange

The Programme Exchange Unit (Internal) helps stations to exchange their best programmes. During 1963, 7,844 tape-recordings and 6,959 scripts were thus exchanged. The Unit also received 770 items from foreign broadcasting organisations during 1963. The External Programme Exchange Unit receives contributions from foreign radio organisations and in return sends them contributions of Indian items. About 100 broadcasting organisations and Indian diplomatic posts abroad received 2,140 programmes under this arrangement in 1963. A central library of recordings on tapes and discs is also maintained at Delhi. It serves both as a reference library and an archive of radio programmes of permanent value. A quarterly External Programme Supply Bulletin, published by the Unit, gives full details of programmes available for distribution.

Transcription Service

The Transcription Service has more than 10,000 tapes in its Library. This includes recordings of important speeches of eminent persons in the social and political life of the country and those who have otherwise enriched the culture and literature of India. In the field of music, the Library has a rich collection of authentic folk music, classical music of the Old Masters representing various Gharanas of Hindustani music and eminent musicians of Karnatak music. To co-ordinate the supply and circulation of

tape-recorded programmes to the different Units and Stations of AIR, a Central Tape Bank is also functioning in this Service.

Advisory Committees

The Central Programme Advisory Committee advises AIR on general principles to be kept in view in the planning and presentation of programmes and suggests methods of making them more useful and interesting. The Central Advisory Board for Music lays down in general terms the music policy for the guidance of AIR. The AIR Liaison Committee maintains effective liaison with the radio trade and industry. At the stations, public opinion is associated with the planning and presentation of programmes through (i) the Programme Advisory Committee (attached to all stations), (ii) the Rural Advisory Committee (attached to all stations), (iii) the Consultative Panels for Educational Broadcasts (attached to stations broadcasting school programmes) and Panels for University Programmes, and (iv) Advisory Committee for Industrial and Tribal Programmes (attached to stations broadcasting such programmes).

News Services

News bulletins in the Home Services of AIR are broadcast from Delhi six times in English and four times in Hindi each day; in Bengali, Oriya, Tamil, Telugu, Kannada, Malayalam, Punjabi, Marathi, Gujarati, Assamese and Urdu three times a day; in Kashmiri and Dogri twice a day; in Gorkhali once a day. Daily commentaries are also broadcast in Kashmiri, Urdu, Bengali and NEFA-Assamese.

One hundred and twenty-seven bulletins in 29 different Indian and foreign languages are broadcast daily. The Lucknow, Bhopal, Patna, Jaipur and Jullundur stations broadcast a regional news bulletin in Hindi, Bombay in Marathi, Madras in Tamil, Calcutta in Bengali, Hyderabad in Telugu, Bangalore in Kannada, Trivandrum in Malayalam, Gauhati in Assamese, Kohima in six Naga dialects and Assamese, Shillong in seven dialects, Cuttack in Oriya, Ahmedabad in Gujarati and Srinagar-Jammu in Kashmiri, Dogri, Urdu and Pushto. Jullundur also broadcasts a bulletin in Punjabi. Radio newsreel programmes—two in English and two in Hindi—are broadcast every week, besides a series of special newsreels on important occasions. A weekly talk entitled "Matters of the Moment" is broadcast every Sunday.

External Services

The External Services programmes are broadcast in 16 languages practically round the clock for listeners in Asia, Australia, New Zealand, Africa and Europe. Broadcasts for people of Indian origin abroad are directed to South-East Asia, East and Central Africa, Aden, Mauritius and Fiji and are in four languages, viz., Gujarati, Hindi, Konkani and Tamil. The broadcasts to non-Indian listeners abroad are in 12 languages, viz., Arabic, Burmese, Cantonese, English, French, Indonesian, Kuoyu, Nepali, Persian, Pushto, Swahili and Tibetan. During 1963, programmes broadcast to listeners abroad totalled about 8,000 hours.

Production of Radio Receivers

From a small beginning of 3,036 sets in 1947 and of 1,50,596 sets in 1956, the production of radio receiving sets in India rose to about 4,00,000 sets during 1963.

Wire Broadcasting

Inaugurated on May 12, 1961, to enable low-income groups to listen to AIR broadcasts, the Wire Broadcasting Service covers the Lodi Colony, Kasturba Nagar, Aliganj, Karbala and Thyagaraja Nagar localities of Delhi. There are at present about 2,000 subscribers.

Broadcast Receiver Licences

There were 36,02,422 broadcast receiver licences in force, as on December 31, 1963. According to circle-wise breakdown, Bombay had the largest number of licences (5,09,521), followed by West Bengal (4,95,332), Punjab including Himachal Pradesh and Jammu and Kashmir (3,95,876), Madras (3,76,645), Uttar Pradesh (2,95,773); Gujarat (2,78,782), Central Circle comprising Madhya Pradesh (2,29,522), Andhra Pradesh (2,16,464), Mysore (1,90,688), Delhi (1,88,015), Bihar (1,26,643), Rajasthan (1,09,244), Kerala (96,489), Assam (48,241), and Orissa (45,187).

Television

The Television Service was inaugurated at New Delhi on September 15, 1959. This Service is available for viewers in Delhi within a range of 25 miles. Designed primarily for community viewing in tele-clubs and for in-school teaching, the programmes are of two distinct types. Programmes for viewing in the tele-clubs or the Social Education Programmes, broadcast twice a week on Tuesdays and Fridays for a duration of 40 and 70 minutes respectively, are mainly informative and educational in character and include illustrated talks, interviews, dialogues, discussions, documentary films, plays, skits, puppet shows, and short music items. One hundred and eighty tele-clubs, with a membership of 3,600 and an estimated audience of 20,000 for each programme, are functioning in the Delhi region.

The UNESCO Project on Social Education, meant primarily to assess the effectiveness of social education telecasts on organised groups or tele-clubs, was undertaken with the co-operation of UNESCO in 1960 and completed in 1961. The assessment report prepared by the Indian Adult Education Society and published by UNESCO in 1963 has established the effectiveness of the television medium not only in communicating information but also in moulding attitudes.

The School Television Section is putting out regular in-school instructional programmes on selected subjects supplementing the regular school instruction since 1961. Lessons in Chemistry, Physics and Current Affairs for the 9th and 10th classes and English lessons for the 6th class of the Higher Secondary Schools in the capital are being televised. Three hundred and ninety-four television sets have been installed in 214 schools. All the Higher Secondary Schools in Delhi are proposed to be covered in due course. It is estimated that more than 35,000 students view science lessons, 50,000 students take advantage of lessons on Current Affairs, and 28,000 students view English lessons.

There are at present 551 television receivers in operation in Delhi.

THE PRESS

According to the seventh report of the Registrar of Newspapers for India, released in September 1963, there were 9,211 newspapers and periodicals in existence on December 31, 1962, as against 8,305 in 1961. This marked an increase of 10.9 per cent over the preceding year.

Of the total of 9,211 newspapers, 623 were 'General Interest' newspapers and included 481 dailies and 36 non-dailies (published at intervals of less than a week) of A category and 106 dailies and non-dailies belonging to B category papers such as market reports, weather bulletins, etc. The number of periodicals was 8,588, of which 1,708 belonged to the B category.

The highest number (1,440) of newspapers was published in the State of Maharashtra, followed by West Bengal (1,273), Uttar Pradesh (1,196), Delhi (961) and Madras (873). Table 43 gives the Statewise break-up of newspapers according to periodicity.

An analysis of the language-wise distribution of newspapers shows that

English was the language of the largest number of papers (1,871), Hindi coming next with 1,781. The largest number of dailies (139), were, however, published in Hindi. Of the 83 dailies published in English, 34 were market reports or commercial bulletins. The respective percentages for newspapers published in major languages were : English 20.3; Hindi 19.3; Urdu 8; Bengali 6.4; Gujarati 6.1; Marathi 5.4; and Tamil 5.1. Table 44 shows the distribution of newspapers according to State and language, as on December 31, 1962.

*Circulation of Newspapers**

Out of a total of 9,211 newspapers and periodicals published in 1962 data of circulation were available in respect of 5,494. The total average circulation of these papers was 212.59 lakhs as against 187.69 lakhs commanded by 4,698 papers in 1961. A study of the circulation of 4,217 newspapers, for which data were available for both the years, shows that the average increase during 1962 was 8.8 per cent over that of 1961. The increase in circulation in 1962 was shared by papers of all languages and periodicities. While the dailies and the weeklies recorded increases of 11.7 and 9.9 per cent respectively, the highest increase according to languages was recorded by Sanskrit papers (16.7 per cent) followed by Telugu papers (11.4 per cent); Gujarati (11.3 per cent); English (10.3 per cent); Tamil (9.2 per cent); and Urdu (9.0 per cent). Table 45 shows the circulation of newspapers according to periodicity for 1961 and 1962.

In 1962 newspapers in English continued to have the largest circulation, i.e. 54.26 lakhs or 25.5 per cent of the total. Next in importance were Hindi newspapers with a circulation of 38.50 lakhs or 18.1 per cent. Others in order of importance were : Tamil (26.39 lakhs), Gujarati (14.13 lakhs), Malayalam (14.11 lakhs), Marathi (13.33 lakhs), Bengali (11.10 lakhs), Urdu (10.56 lakhs) and Telugu (7.55 lakhs).

Table 46 gives the total number of papers for which data were available for 1961 and 1962 respectively, and their language-wise circulation in each of the two years.

Newsprint

During 1963, only 90,000 tonnes of newsprint could be imported within the foreign exchange ceiling of Rs. 6.51 crores made available for the purpose. The quantity imported from various countries was : Canada 31,000 tonnes; Scandinavian countries 35,000 tonnes; USSR 20,000 tonnes; and Poland 4,000 tonnes.

The Nepa Mills could supply about 28,000 tonnes of newsprint to newspapers and periodicals. The demand for newsprint was much higher but had to be restricted considerably due to continued difficult foreign exchange position.

The eligibility of each newspaper for newsprint is determined by the Registrar of Newspapers for India on the basis of the size, page level and periodicity of the newspaper, its circulation and regularity of publication. It is sanctioned on the Registrar's recommendation.

Press Information Bureau

Information regarding the policy, plans, achievements and other activities of the Government of India is made available to the Press in English and 12 Indian languages by the Press Information Bureau. During 1963, textual services were received by about 4,120 Indian newspapers and periodicals, photographic services by 446 and photographs in the form of ebanooid blocks by 1,100. Indian and foreign correspondents accredited to the Government of India at headquarters numbered 227 on December 31, 1963.

* Circulation figures comprise copies sold and copies distributed free.

TABLE 43
DISTRIBUTION OF NEWSPAPERS ACCORDING TO STATE AND PERIODICITY
(As on 31-12-1962)

State	General Interest Newspapers 'A'						Periodicals					
	Dailies (including papers issued at least 4 days a week)			Non-dailies			General Interest Newspapers 'B'			Weeklies		
	Morn- ing	Even- ing	Total	Bi-& Tri- Weeklies	Week- lies	Total	Dailies	Bi-and Tri- Weeklies	Total	A	B	Total
Andhra Pradesh ..	25	3	28	3	2	5	4	—	4	126	3	129
Assam ..	3	1	4	—	—	—	—	—	—	27	—	27
Bihar ..	10	1	11	—	—	—	—	—	—	62	6	68
Gujarat ..	29	1	30	—	1	1	1	—	1	89	14	103
Kerala ..	27	16	43	—	—	—	—	—	—	54	—	54
Madhya Pradesh ..	40	3	43	3	—	3	—	—	—	93	12	105
Madras ..	20	15	35	—	1	1	12	4	16	125	6	131
Maharashtra ..	60	16	76	3	2	5	40	2	42	285	29	314
Mysore ..	23	14	37	2	—	2	—	—	—	111	—	111
Orissa ..	1	6	7	—	—	—	—	—	—	11	9	20
Punjab ..	23	3	26	3	—	3	—	2	2	208	6	214
Rajasthan ..	14	5	19	2	—	2	—	—	—	142	4	146
Uttar Pradesh ..	49	19	68	7	—	7	4	5	9	411	25	436
West Bengal ..	22	3	25	3	1	4	8	5	13	202	18	220
Delhi ..	13	8	21	1	1	2	10	9	19	112	22	134
Himachal Pradesh ..	—	—	—	—	—	—	—	—	—	1	—	1
Manipur ..	5	—	5	—	—	—	—	—	—	2	—	2
Tripura ..	2	—	2	1	—	1	—	—	—	7	—	7
Nagaland ..	—	—	—	—	—	—	—	—	—	—	—	—
Andaman & Nicobar Islands ..	1	—	1	—	—	—	—	—	—	—	—	—
TOTAL ..	367	114	481	28	8	36	79	27	106	2068	145	2213
										775	100	875

TABLE 44
DISTRIBUTION OF NEWSPAPERS ACCORDING TO STATE AND LANGUAGE
(As on 31-12-1962)

State	Eng- lish	Hindi	Assa- mese	Ben- gali	Gujh- rati	Kan- nada	Mal- yalam	Mar- athi	Ori- ya	Pun- jabi	Sans- krit	Ta- mil	Telu- gu	Urdu	Bi- lingual	Multi- lingual	Others	Total
Andhra Pradesh	60	10	—	—	—	—	1	1	—	—	—	—	238	77	47	35	1	471
Assam	14	5	16	19	—	—	—	—	—	—	—	—	—	—	7	—	15	76
Bihar ..	40	108	—	1	—	—	—	—	—	—	—	—	—	21	13	—	8	206
Gujarat ..	35	11	—	—	398	—	—	2	—	—	—	—	—	1	22	14	7	490
Kerala	32	2	—	—	—	1	207	—	—	—	1	5	—	—	101	48	—	397
Madhya Pradesh	13	207	—	—	1	—	—	1	—	—	—	—	—	13	12	3	3	253
Madras	223	7	—	—	3	3	7	2	—	—	2	446	44	12	83	40	1	873
Maharashtra	427	88	—	1	158	6	4	483	—	7	4	5	1	57	96	68	38	1,440
Mysore	57	1	—	—	—	216	1	8	—	—	—	—	2	14	27	15	4	350
Orissa ..	15	2	—	—	—	—	—	—	69	—	—	—	—	206	21	42	—	149
Punjab	75	86	—	—	—	—	—	—	—	119	1	—	—	—	69	136	1	693
Rajasthan	8	215	—	1	—	—	—	—	—	—	1	—	—	2	54	14	20	315
Uttar Pradesh	88	754	—	4	—	—	—	—	—	3	3	1	2	173	139	25	7	1,196
West Bengal ..	372	91	5	545	1	—	—	1	11	3	2	5	4	124	133	67	15	1,273
Delhi ..	406	187	—	5	1	3	4	2	1	26	2	—	—	149	114	41	11	961
Himachal Pradesh	—	6	—	—	—	—	—	—	—	—	—	—	—	—	5	1	—	12
Manipur	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	16	15	35
Tripura	—	—	—	13	—	—	—	—	—	—	—	—	—	—	—	—	1	14
Nagaland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
Andaman and Nicobar Islands	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
TOTAL	1,871	1,781	21	589	562	229	224	500	81	158	16	465	291	749	945	580	149	9,211

TABLE 45

PERIODICITY-WISE COMPARATIVE CIRCULATION OF COMMON
NEWSPAPERS 1961 AND 1962

Periodicity	No. of Common Newspapers	Circulation (in '000)			Percentage Increase or Decrease
		1961	1962	Increase or Decrease	
G.I.N.					
Dailies A	307	4643	5188	+545	+11.7
Non-dailies .. A	22	304	339	+ 35	+11.5
Dailies B	40	23	25	+ 2	+ 8.7
Non-dailies .. B	19	32	32	—	—
TOTAL	388	5002	5584	+582	+11.6
Weeklies A	892	4215	4548	+333	+ 7.9
Weeklies B	71	110	206	+ 96	+87.3
TOTAL	963	4325	4754	+429	+ 9.9
Fortnightlies .. A	308	1162	1244	+ 82	+ 7.1
Fortnightlies .. B	54	295	312	+ 17	+ 5.8
TOTAL	362	1457	1556	+ 99	+ 6.8
Monthly A	1544	4882	5168	+286	+ 5.9
Monthly B	272	673	667	— 6	— 0.9
TOTAL	1516	5555	5635	+280	+ 5.0
Quarterlies & Half-yearlies .. A	352	441	518	+ 77	+17.5
Quarterlies & Half-yearlies .. B	166	261	302	+ 41	+15.7
TOTAL	518	702	820	+118	+16.8
Annuals A	25	198	212	+ 14	+ 7.1
Annuals B	145	116	118	+ 2	+ 1.7
TOTAL	170	314	380	+ 16	+ 5.1
TOTAL A	3450	15845	17217	+1372	+ 8.7
TOTAL B	767	1510	1662	+152	+10.1
GRAND TOTAL	4217	17355	16879	+1524	+6.9

The Bureau's Information Services in Hindi and Urdu are run from the head office in New Delhi. The offices at Lucknow, Varanasi, Patna, Jaipur, Bhopal and Calcutta also serve the Hindi Press. Similar service to Urdu newspapers is provided by offices at Jullundur, Srinagar, Hyderabad and Calcutta. Services in other Indian languages are issued from the regional offices at Calcutta (Bengali), Gauhati (Assamese), Cuttack (Oriya), Bombay, Poona and Nagpur (Marathi), Ahmedabad and Bombay (Gujarati), Madras (Tamil), Hyderabad (Telugu), Bangalore (Kannada), Ernakulam (Malayalam) and Jullundur (Punjabi). Of the Bureau's 19 regional and branch offices, 17 are linked with headquarters by teleprinter lines.

Information Centres have been opened at New Delhi, Jullundur, Srinagar, Madras, Lucknow, Patna, Hyderabad, Trivandrum, Rajkot, Bhubaneswar, Bombay, Bangalore, Nagpur, Jaipur, Bhopal, Shillong, Madurai, Ajmer and Indore as part of a scheme to open Information Centres at State capitals and other important places.

TABLE 46
LANGUAGE-WISE CIRCULATION OF NEWSPAPERS FOR 1961 (REVISED) AND 1962
(Circulation in '000)

Language	G.I.N. (A)			G.I.N. (B)			Periodicals		
	1961		1962	1961		1962	1961	1962	
	No. of News-papers	Circulation	No. of News-papers	Circulation	No. of News-papers	Circulation	No. of News-papers	Circulation	No. of News-papers
English	52	1,542	49	1,680	33	41	1,221	4,052	1,116
Hindi	106	777	84	752	6	3	1,084	3,822	959
Assamese	1	7	1	7	—	—	16	74	17
Bengali	10	248	12	305	1	—	380	944	310
Gujarati	32	375	28	420	1	1	360	995	332
Kannada	26	196	19	177	1	—	141	415	118
Malayalam	32	580	29	626	1	—	132	800	127
Marathi	37	466	28	505	6	1	303	912	275
Oriya	5	65	5	71	1	—	41	98	41
Punjabi	13	75	6	33	1	—	104	209	81
Sanskrit	—	—	—	—	—	—	1	7	8
Tamil	26	659	22	670	5	13	27	2,418	249
Telugu	13	173	9	162	2	—	183	591	167
Urdu	60	324	48	243	2	1	439	913	387
Bi-lingual	8	96	7	46	19	10	58	643	469
Multi-lingual	—	—	1	1	2	—	35	371	372
Others	8	18	6	19	—	—	93	139	95
TOTAL	429	5,601	354	5,717	81	81	5,720	17,403	5,076
						56			15,486

The Bureau also organises visits of newspapermen, writers and artists to important development projects in the country.

In the States, liaison with the Press is maintained by the State Departments of Information and Publicity.

Press Consultative Committee

By a Resolution dated September 22, 1962, a Press Consultative Committee has been set up to bring about closer liaison between the Government and the Press on matters of common interest. The Committee consists of the Minister of Information and Broadcasting as Chairman, the Deputy Minister of Information and Broadcasting as Deputy Chairman, five eminent persons from the public, who are not connected with the Press, and 15 other members drawn from different sections of the Press, including the Presidents of the Indian and Eastern Newspaper Society, the Indian Languages Newspapers Association, the All-India Newspaper Editors' Conference and the Advertising Agencies' Association of India.

The functions of the Committee are to advise the Government on all matters relating to the Press which are referred to it, and also to discuss such general issues pertaining to the Press as are given notice of by the members.

The Committee, which held two meetings during 1963, suggested certain changes in the Press Council Bill as passed by the Rajya Sabha in 1956. It also formulated a Code of Conduct for the Press with special reference to national integration and the emergency, which was forwarded to newspapers for adoption. The new Press Council Bill was introduced in the Rajya Sabha on November 26, 1963.

Freedom of the Press

Article 19(1) of the Constitution guarantees "the right to freedom of speech and expression" to all citizens. This freedom has been interpreted by the courts to include freedom of the Press. Under the Constitution (First Amendment) Act of 1951, Parliament can enact legislation reasonably restricting the exercise of this right "in the interests of the security of the State, friendly relations with foreign States, public order, decency or morality, or in relation to contempt of court, defamation or incitement to an offence". The words "reasonable restrictions" occurring in clause (2) of Article 19 make such legislation justiciable.

There are four main Central laws relating to the Press : (i) The Press and Registration of Books Act, 1867; (ii) The Working Journalists (Conditions of Service) and Miscellaneous Provisions Act, 1955; (iii) The Delivery of Books and Newspapers (Public Libraries) Act, 1954; and (iv) The Parliamentary Proceedings (Protection of Publication) Act, 1956. The Working Journalists Act was amended in 1962 to provide for payment of gratuity to a working journalist if he voluntarily resigns on any ground whatsoever after a total service of ten years and also on grounds of conscience if his total service is not less than three years. It also provides for the setting up of wage boards for journalists from time to time. Under this provision, the Government of India appointed the second Wage Board for Working Journalists on November 13, 1963, with G. K. Shinde, ex-Chief Justice of the former Madhya Bharat High Court, as chairman.

FILMS

The output of feature films for the year 1963 was 305. Table 47 shows the number of feature films produced in various languages and certified for public exhibition for different years since 1931.

TABLE 47
OUTPUT OF FEATURE FILMS

Language	1931	1941	1947	1951	1956	1961	1962	1963
Assamese ..	—	—	—	—	3	2	2	3
Bengali ..	3	18	38	38	54	36	37	39**
English ..	—	—	—	—	—	—	—	†
Gujarati ..	—	1	11	6	3	7	4	6
Hindi* ..	23	79	186	100	123	109	9—	93
Kannada ..	—	2	5	2	14	12	16	22
Malayalam ..	—	1	—	7	5	11	15	13
Marathi ..	—	14	6	16	13	15	21	16
Oriya ..	—	—	—	—	2	2	6	2
Punjabi ..	—	2	—	4	—	5	5	5
Tamil ..	1	34	29	26	51	49	59	56
Telugu ..	1	16	6	30	27	55	48	46
Konkani ..	—	—	—	—	—	—	—	1
TOTAL ..	28	167	281	219	296	303	307	305

In addition, the Central Board of Film Censors certified a total of 752 short films for public exhibition during the calendar year 1963. These consisted of :

35 mm

- (i) Films other than feature films, exceeding 600 metres in length .. 45
(ii) Short films, 600 metres and below in length .. 646

16 mm

- (i) Films other than feature films, exceeding 240 metres in length .. 14
(ii) Short films, 240 metres and below in length .. 47

TOTAL 752

The following table shows the classification of certified Indian feature films according to the nature of their themes.

TABLE 48
THEMATIC CLASSIFICATION OF FILMS

	1956	1961	1962	1963
Social	160	162	174	162
Crime	11	30	43	39
Fantasy	49	23	21	20
Historical	4	15	5	12
Biographical	4	5	1	4
Mythological	37	32	30	21
Legendary	25	26	21	20
Devotional	2	2	4	5
Children	2	1	—	4
Stunt	—	5	—	4
Adventure	—	2	8	18
Science fiction	—	—	—	—
TOTAL ..	294***	303	307***	305

Film Institute of India

The Film Institute of India, established by the Ministry of Information and Broadcasting for providing all-round technical training in the production of films and facilities for research in film techniques, started functioning in 1961. Training is being imparted in acting, direction-cum-screenplay writing, motion picture photography, sound recording and sound engineering and film editing. One hundred and twenty students are undergoing training in these courses.

*Includes Urdu, Bhojpuri and Rajasthani.

**Includes one 16 mm film.

†Includes one film measuring 889 metres (The Boy and the Parrot) produced by the Children's Film Society.

***While the figure for 1956 excludes two documentary feature films, that for 1962 excludes one Tamil originally certified in 1959 but granted a fresh certificate under a new title in 1962.

The courses in the Institute are conducted by its own staff as well as guest lecturers drawn from the ranks of eminent producers, directors and technicians from the film industry. The Institute has its own processing laboratory and extensive studio facilities which are hired out to outside producers on condition that shooting is co-ordinated with the teaching programme.

Children's Film Society

The Society was registered under the Societies Registration Act in May 1955. The principal aim of the Society is to undertake aid, sponsor, promote and co-ordinate the production, distribution and exhibition of films specially suited or of special interest to children and adolescents. The Society receives an annual grant-in-aid from the Central Government. State Committees have also been formed in a number of States to spread the children's film movement.

The Society has so far produced 20 feature films : 'Char Dost', 'Jaldeep', 'Scout Camp', 'Haria', 'Yatra', 'Guru Bhakti', 'Meera Ka Chitra', 'Dilli Ki Kahani', 'Savitri', 'Story of Two Stamps', 'Mahatirath', 'Chhatrapati Shivaji Maharaj', 'Bapu Ne Kaha Tha', 'Raju Aur Gangaram', 'Hamen Khelane Do', 'Boond Boond Se Sagar', 'Chatur Balak', 'Pahadon Ki Pukar', 'Panch Putliyan' and 'Monkey and the Crocodile', and 13 short films : 'Ganga Ki Lahren', 'Bachon Se Baaten', 'Gulab Ka Phool', 'Alladin and the Magic Lamp', 'Ekata', '26th January', 'Panchatantra Ki Ek Kahani', 'Sara! Biswas', 'Id Mubarak', 'Hero', 'Chetak', 'Nyaya' and 'Jivraj Mahtane Balake Sathe Vartalap'. In addition, the Society adapted two Indian feature films, viz., 'Ram Shastri Ka Nyaya' and 'Bal Ramayana'. Adapted versions of three Russian and five British films were also prepared by the Society.

The Society's film 'Jaldeep' was adjudged the best children's film at the International Film Festival at Venice in 1957. Its films 'Id Mubarak' and 'Dilli Ki Kahani' won All-India Certificates of Merit in the State Awards for Films, 1960. 'Savitri' won the same distinction in 1961, and was also awarded a Certificate of Merit at the Vancouver International Film Festival, 1962. In 1963, 'Panch Putliyan' was awarded the All-India Certificate of Merit.

Besides arranging public exhibition of its films in cinema houses through commercial distributors, the Society also shows its films free of charge to children living in slum and rural areas through social welfare organisations and the Five Year Plan Publicity Units. The Society is maintaining a library of 16 mm prints which are loaned to educational institutions, etc., at concessional rates.

International Film Festivals

During 1963, the following Indian films won awards at international film festivals :

Feature Films

- (1) 'Two Daughters' (Samapti and Post Master in Bengali) won the Selznick Golden Laurel in USA.
- (2) 'Gunga Jumna' won the Paul Revere Silver Bowl for clarity and integrity in the presentation of contemporary issues at the International Film Festival, Boston.
- (3) 'Munna' won a special award for photography at the IV International Festival of Documentary and Experimental Films, Uruguay.
- (4) 'Sat Pake Bandha' won the Best Actress award for its leading lady, Suchitra Sen, at the III International Film Festival, Moscow.

Documentary Films

- (1) 'Jain Temples of India' won the prize for best Documentary at the International Film Festival of Religious Films, Vienna. It also won a Diploma of Honour at the International Film Festival, Locarno.
- (2) 'Vinoba Bhawe, the Man' won a Diploma of Honour at the International Film Festival, Locarno.
- (3) 'Jaipur' won the Bronze Medal at the IV International Festival of Sociological and Ethnological Documentary Films, Florence.

State Awards for Films

State awards for films of high aesthetic and technical standards and of an educative and cultural value have been a regular annual feature since 1954. The awards are given separately for feature, documentary and children's films as well as for educational films in 16 mm and film strips in 35 mm.*

Regional committees at Bombay, Madras and Calcutta consisting of distinguished persons in public life as well as persons from the industry qualified to judge technical standards of films make a preliminary selection of feature films. Separate committees initially examine documentaries and educational films. The final selection is made by the Central Committee.

Recently the Government also instituted Certificates of Merit for the best and the second best story writers of feature films. A cash prize of Rs. 25,000 has been instituted for the best feature film aimed at propagating family planning. Another cash prize of Rs. 20,000 has been instituted for the best feature film on national integration produced in 1964.

Documentaries and Newsreels

The Films Division of the Union Ministry of Information and Broadcasting is mainly responsible for producing short films and newsreels. Till the end of 1963, the Division had released 794 newsreels and 679 short films for exhibition in cinemas. The Division today produces nearly 170 films per year. These include newsreels, documentaries, educational and scientific films. During 1963, 21 films were produced through outside producers, and the Division also released 58 films produced by State Governments in their respective regions.

The shorts and newsreels are produced in 13 languages, viz., English, Hindi, Bengali, Tamil, Telugu, Gujarati, Punjabi, Assamese, Kannada, Urdu, Oriya, Marathi and Malayalam. Films intended for circulation in rural areas through mobile vans are of slower tempo so as to enable the rural audiences to understand them easily.

Interesting events within and outside India are included in the weekly Indian News Review. Items from foreign countries are received from 26 organisations as part of an agreement of free exchange of newsreel material. Important events within the country are covered by 14 cameramen stationed at various centres in India. Sometimes the event covered by film units of the State Governments are also incorporated in the weekly newsreels.

Every cinema is required under the terms of its licence to exhibit at each performance not more than 2,000 ft. of films approved by the authorities as documentary films, films of scientific and educational value and films dealing with news and current events. These are supplied by the Films Division on payment of rental not exceeding one per cent of the average weekly net collections. One newsreel and one short film a week are released alternately to all cinemas throughout the country.

Prints can be obtained on loan by Government and semi-Government departments, educational institutions, hospitals, charitable, social welfare and other non-profit-making organisations. These are made available through the network of six branch offices of the Films Division at Bombay,

*See Appendices for awards for films produced in 1963.

Madras, Calcutta, Nagpur, Lucknow and Secunderabad and also through the 91 Field Publicity Units of the FYPP organisation of the Government of India. Films are also loaned to individuals for non-commercial shows by these organisations on payment of nominal hire. Exclusive shows of documentary films and newsreels are also regularly held by the Division at New Delhi, Madras and Bombay. These shows are open to public on a small admission fee.

Documentaries approved for external publicity are supplied to 81 Missions abroad. A special monthly overseas edition of newsreels is compiled and supplied to some 36 external posts. These are utilised by the Indian Missions for exhibition in their premises and outside and are also lent to social and educational institutions, local Indian residents, etc. Besides, the Films Division has regular arrangements for screening its documentaries in cinemas and on television in some foreign countries.

Film Censorship

The Central Board of Film Censors was constituted in January 1951 for the purpose of sanctioning films for public exhibition in the whole of India. The Board consists of eight members, including the Chairman, all of whom are appointed by the Government of India. The head office of the Board is at Bombay and there are regional offices at Bombay, Calcutta and Madras. The Regional Officers are assisted in the examination of films by Advisory Panels, the members of which are appointed by the Government of India. They include educationists, doctors, lawyers, social workers, etc.

Every film, in respect of which an application for certification is made to the Board, is viewed by an Examining Committee. On the recommendations of the Examining Committee the Board may refuse a certificate for the public exhibition of any film, or grant it with or without cuts or modifications to be carried out in the film. Where this decision is not acceptable to the applicant concerned, he may ask for reconsideration of the film by a Revising Committee which is presided over by the Chairman. A film may also be referred to a Revising Committee by the Chairman on his own initiative. The applicant is given an opportunity to put forward his point of view both before the Examining and Revising Committees. Finally, an appeal against the decision of the Board may be made to the Government of India.

Certificates for unrestricted public exhibition are called 'Universal' certificates and bear a 'U' mark. Films restricted to adults, i.e. to persons above the age of 18 years, are given 'Adult' certificates and bear an 'A' mark. If any portion of a film is excised, a triangular mark is put at the left-hand bottom corner of the certificate, and a description of the deleted portion is endorsed on the reverse of the certificate. The decision of the Board in respect of each film examined by it is published in the Gazette of India.

Directions have been issued by the Government for the guidance of members of the Examining and Revising Committees of the Board. They include broad principles and detailed rules which aim at discouraging crime, vice, immorality, incitement to disorder, violence, breach of law, disrespect to a foreign country or people, etc.

During 1963, the Board examined 2,472 films. Twenty-three films (features 15 and trailers 8) were referred to Revising Committees. The Board granted 1,345 'U' certificates and 94 'A' certificates in respect of foreign films, the corresponding figures for Indian films being 1,048 and 9. Nineteen films (18 foreign and 1 Indian) were refused certificates. The total length excised from the films was 15,534 metres. A total of 1,767 films were declared by the Board as 'predominantly educational'.

Film Consultative Committee

In consultation with the various organisations of the film industry, the Government of India have set up a Film Consultative Committee to bring

about closer liaison between the Government and the film industry on matters of common interest and to advise the Government on matters affecting the film industry and its future development. With the Minister of Information and Broadcasting as its chairman, the Committee includes five eminent members of the public besides 15 other members drawn from the different sections of the film industry.

Film Finance Corporation

Following a recommendation of the Film Enquiry Committee, the Government of India set up the Film Finance Corporation in March 1960, with an authorised capital of Rs. 1 crore, of which Rs. 50 lakhs now constitutes the issued capital, wholly subscribed by the Government. The Corporation grants loans to producers of films of good quality providing healthy entertainment. It gives preference to themes based on national problems, social and cultural, and subjects of universal appeal, to encourage production of works of art and of lasting value. Loans are generally given up to Rs. 3.5 lakhs per film at an interest of 9 per cent, subject to a rebate of 2 per cent for prompt and regular repayments.

Import of Cinematographic Film and Equipment

The quantity and value of cinematographic film—raw and exposed—and equipment imported during the period 1958 to 1963 are shown below.

TABLE 49
IMPORT OF CINEMATOGRAPHIC FILM AND EQUIPMENT

Year	Raw Film		Exposed Film		Sound recording equipment (value in Rs. lakhs)	Projection equipment (value in Rs. lakhs)
	Metres (lakhs)	Value (Rs. lakhs)	Metres (lakhs)	Value (Rs. lakhs)		
1958	653·10	164·06	33·87	32·23	5·46	39·45
1959	649·84	277·32	40·82	38·58	2·17	24·32
1960	827·25	194·33	50·90	37·73	1·41	32·43
1961	537·19	165·47	51·49	44·79	3·76	34·52
1962	722·35	177·18	55·95	44·29	2·95	33·08
1963	807·09	204·02	27·95	27·28	2·09	31·03

Export of Indian Films

An Export Promotion Committee for Films, with headquarters at New Delhi, has been constituted under the chairmanship of the Minister for Information and Broadcasting. Its object is to suggest ways and means of promoting exports.

A development of major significance to the film industry was the inauguration in September 1963 of the Indian Motion Picture Export Corporation Ltd. set up under the Indian Companies Act with a total share capital of Rs. 1 crore to be subscribed by both the industry and Government. Among the objects of the Corporation are to produce, purchase and export films and to develop and maintain facilities for marketing and exhibition of Indian films abroad.

Table 50 shows the foreign exchange earnings from the export of Indian films during 1963.

TABLE 50
FOREIGN EXCHANGE EARNED BY INDIAN FILMS IN 1963

(in thousand rupees)

Country	Outright Sale	Rental	Total
<i>Sterling Area</i>			
Aden	14	1,57	1,71
Australia	17	8	25
Bahrain	1,07	—	1,07
British East Africa	18,23	3,36	21,59
British Guiana	19	25	44
British West Africa	2,04	13	2,17
British West Indies	1,40	1,06	2,46
Burma	20	9,34	9,54
Ceylon	2,279	71	23,50
Cyprus	7	11	18
Dubai	1,39	—	1,39
Fiji	2,13	90	3,03
Ghana	1,07	—	1,07
Gibraltar	34	—	34
Hong Kong	26	1	27
Kuwait	8	—	8
Malaysia	26,76	1,12	27,88
Mauritius	6,08	40	6,48
New Zealand	6	—	6
Nigeria	2,36	10	2,46
Nyasaland	10	—	10
Pakistan	66	—	66
Persian Gulf Ports	3,97	1,68	5,65
South Rhodesia	10	—	10
South Africa	2,59	20	2,79
Sierra Leone	21	—	21
Seychelles	3	—	3
Somaliland	6	—	6
Trinidad	74	—	74
<i>Non-Sterling area U. K.</i>	9,65	2,42	12,07
Afghanistan	11	51	62
Argentina	7	3	10
Austria	5	—	5
Belgium	9	—	9
Brazil	24	—	24
Cambodia	1,08	—	1,08
Canada	19	2	21
Chile	8	—	8
Congo	13	—	13
Cuba	8	—	8
Czechoslovakia	7	—	7
Dutch West Indies	49	—	49
Egypt (UAR)	43	—	43
Ethiopia	10	—	10
France	1,19	41	1,60
Finland	3	—	3
French North Africa	49	—	49
Greece	11	10	21
Hungary	9	—	9
Indonesia	51	—	51
Iran	2,13	—	2,13
Iraq	16	7	23
Israel	50	—	50
Italy	28	—	28
Japan	31	—	31
Lebanon	7,32	—	7,32
Laos	6	—	6
Madagascar	13	—	13
Morocco	7	—	7
Mexico	2	—	2
Netherlands	12	—	12
Norway	8	—	8

TABLE 50 (concl'd.)

Country	Outright Sale	Rental	Total
Poland	6	—	6
Panama	42	—	42
Philippines	7	—	7
Rumania	5	—	5
Saudi Arabia	48	—	48
Spain	7	—	7
Sudan	3,90	43	4,33
Sweden	6	—	6
Switzerland	8	—	8
Syria	42	—	42
Thailand	4,49	25	4,74
Turkey	4	—	4
USA	2,68	1,19	3,87
USSR	3,80	—	3,80
Vietnam (S)	1,79	—	1,79
West Germany	54	—	54
Yemen	17	—	17
Yugoslavia	5	—	5
GRAND TOTAL	1,40,92	26,45	1,67,37

PUBLICATIONS

National Bibliography

Under the Delivery of Books (Public Libraries) Act, 1954, the publisher of every book in India is required to deliver at his own expense a copy of the book to the National Library, Calcutta, within 30 days of its publication. Pending the construction of a suitable building for the proposed Central Reference Library at Delhi, which will also receive a copy of every book published in India, its National Bibliography Unit was set up at Calcutta in 1957. This Unit brought out the first volume of the Indian National Bibliography (Annual Volume 1958) in November 1959. This cumulated volume covered Indian publications in Bengali, English, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, Telugu and Urdu languages received in the National Library, Calcutta, during the year 1958. The Bibliography excludes musical scores, maps, periodicals and newspapers, keys and guides to text-books and other ephemeral material, such as trade catalogues, telephone directories, company reports, and publicity pamphlets and so on.

The Bibliography consists of two parts, each divided into two sections, classified and alphabetical—the first part dealing with general publications and the second with Government publications including those of quasi-government bodies.

Since the publication of the first cumulated volume for the year 1958, the Unit has been publishing quarterly issues of the National Bibliography, the latest issue covering publications received during January-March 1963.

Revision of Gazetteers

As part of the general educational development under the Second Five Year Plan, the Government of India took up the work of revising the Gazetteers of India in 1957. They also provided financial assistance to the State Governments for the revision of District Gazetteers. The first volume of the "Gazetteer of India" has already been sent to the press, and a major portion of the second volume has been written. Of the District Gazetteers so far approved by the Union Government, 29 have been published, 15 are in the press, and 11 waiting to be sent to the press. Thirteen draft District Gazetteers are under scrutiny.

Copyright

The Copyright Act, 1957, which amended and consolidated all previous laws on the subject, came into force in January 1958. It provides for the establishment of a Copyright Board for adjudicating on certain matters specified in the Act. The Government of India also ratified the Universal Copyright Convention and it came into force in respect of India with effect from January 21, 1958. Until December 31, 1963, the copyright of 2,939 works, comprising 2,032 literary (including 9 foreign) works, 904 artistic works and 3 cinematograph films, were registered by the Copyright Office. The Government have also extended the operation of the 1957 Act to the works of more than 20 foreign countries.

Publications Division

The Publications Division in the Ministry of Information and Broadcasting is responsible for the preparation, production, distribution and sale of books of general interest, popular pamphlets, pictorial albums, journals, etc., for providing authentic information about the country's cultural heritage, activities of the Government, progress of developmental programmes and places of tourist interest. Publications are brought out in English, Hindi and the regional languages. A similar role is performed in the States by the Departments of Information and Publicity.

Besides acting as the centralised agency of the Union Government for publications of a non-technical nature, the Division undertakes the publication of literature for such organisations as the National Book Trust and the Central Social Welfare Board. It also acts as the distributor for some of the publications of the Sahitya Akademi, the National Museum, Lalit Kala Akademi, All-India Handicrafts Board, etc.

The Division publishes 17 journals including general and cultural magazines such as *Aikal* (in Hindi and Urdu), journals devoted to the Plan such as *Yojana* (in English and Hindi), *Bhagirath* and *Kurukshetra* (in English and Hindi) as well as journals for overseas readership such as *Indian and Foreign Review* and *Traveller in India*.

During 1963, the Division released a total of 296 books and pamphlets, both of general interest (including children's literature) and for tourist and Plan publicity, in various languages and sold about 22.50 lakh assorted copies of various magazines and pamphlets. It also distributed free 46 lakh pieces, including publications connected with the Chinese aggression, during the same period.

ADVERTISING AND VISUAL PUBLICITY

Directorate of Advertising and Visual Publicity

The Directorate of Advertising and Visual Publicity functions as the central organisation of the Government of India for popularisation and promotion of the activities of the State among the people through advertising and visual media of mass communication. It is responsible for the planning, designing and production of publicity material on behalf of the various Ministries and Departments (excepting Railways) and a number of autonomous bodies under Government. In terms of media and techniques, the Directorate utilises display and classified press advertisements, printed publicity in the form of brochures, booklets, folders, posters, etc., and outdoor publicity media like cinema slides, metal tablets, hoardings, as well as exhibitions.

The Exhibition Division at headquarters and its 15 field units along with the railway exhibition-cum-cinema coaches and mobile vans organised a total of 755 exhibitions during 1963. The Division also maintains a

separate exhibition unit for family planning, which organised 767 exhibitions during the same period.

The Directorate placed 640 display and 8,751 classified advertisements and produced 3.02 crore copies of printed publicity material in 1963. The printed material is distributed by direct mailing from the headquarters as well as regional distribution centres at Bombay, Calcutta and Madras.

The Directorates of Information and Publicity in the States perform similar functions in regard to advertising and visual publicity within their jurisdiction.

Advertising Council of India

Founded in 1959 by the Indian and Eastern Newspaper Society, the Indian Language Newspapers Association, the Indian Society of Advertisers, the Advertising Agencies' Association of India and the Master Printers, the Advertising Council of India is an advisory and consultative body. Apart from evolving an ethical code for the conduct of advertising in the country and supervising the observance of this code, the Council concerns itself with problems of education in advertising and with public service advertising.

CHAPTER XII

ECONOMIC STRUCTURE

India is a country with a developing economy, rich in natural resources and manpower. Her resources, human as well as material, are capable of fuller exploitation and more intensive utilisation. The Indian economy is still predominantly agricultural; about half of the country's national income is derived from agriculture and allied activities which absorb nearly three-fourths of its working force. Since independence it has been the aim of national planning to accelerate the pace of industrial development and at the same time to increase productivity in agriculture. Net investment in the economy has been rising in recent years. At the end of the Second Plan it amounted to about 11 per cent of the national income.

NATIONAL AND PER CAPITA INCOMES

Table 51 shows the national and per capita incomes at current and constant prices between 1948-49 and 1962-63. The preliminary estimates for 1962-63, which are subject to revision, show that the national income in real terms increased modestly by 2.4 per cent in the second year of the Third Plan (making a total of 5 per cent in the first two years of the Plan) as against the average annual rate of 6 per cent envisaged for the Plan period.

TABLE 51
NATIONAL AND PER CAPITA INCOMES

Year	National income (in crores of rupee)		Per capita income (in rupee)	
	At current prices	At 1948-49 prices	At current prices	At 1948-49 prices
1948-49	8,650	8,650	249.6	249.6
1950-51	9,530	8,550	266.5	247.5
1955-56	9,580	10,480	255.0	267.8
1960-61	14,140	12,730	325.7	293.2
1961-62	14,800	13,060	333.6	294.3
1962-63 (preliminary)	15,400	13,370	339.4	294.7

The index numbers of national and per capita incomes for 1950-51, 1955-56, 1960-61, 1961-62 and 1962-63 (preliminary), with 1948-49 as base, are given below.

TABLE 52
INDEX NUMBERS OF NATIONAL AND PER CAPITA INCOMES

(Base : 1948-49=100)

Year	National income		Per capita income	
	At current prices	At 1948-49 prices	At current prices	At 1948-49 prices
1950-51	110.2	102.3	106.8	92.2
1955-56	115.4	121.2	102.2	107.3
1960-61	163.5	147.2	133.5	117.5
1961-62	171.1	151.0	133.7	117.9
1962-63 (preliminary)	178.0	154.6	136.0	118.1

The following table shows the distribution of national income (at current prices) by occupational categories.

TABLE 53
NATIONAL INCOME BY OCCUPATIONAL CATEGORIES

(in crores of rupees)

	1948-49	1950-51	1955-56	1960-61	1961-62	1962-63*
Agriculture						
Agriculture, animal husbandry and ancillary activities	4,160	4,780	4,390	6,680	6,770	6,780
Forestry ..	60	70	70	110	120	120
Fishery ..	30	40	60	100	70	70
Total for agriculture	4,250	4,890	4,520	6,890	6,960	6,970
Mining, manufacturing and small enterprises						
Mining ..	60	70	100	160	170	200
Factory establishments	550	550	780	1,320	1,540	1,690
Small enterprises	870	910	970	1,120	1,170	1,210
Total for mining, manufacturing and small enterprises	1,480	1,530	1,850	2,600	2,880	3,100
Commerce, transport and communication						
Communication (post, telegraph and telephone)	30	40	50	60	70	80
Railways ..	170	180	250	360	380	430
Organised banking and insurance	50	70	90	160	190	210
Other commerce and transport	1,350	1,400	1,490	1,760	1,840	1,900
Total for commerce, transport and communication	1,600	1,690	1,880	2,340	2,480	2,620
Other services						
Professions and liberal arts	430	470	560	740	790	840
Government service (administration)	400	430	570	900	1,000	1,170
Domestic service	120	130	140	190	210	220
House property	390	410	460	530	550	560
Total for other services	1,340	1,440	1,730	2,360	2,550	2,790
Net domestic product at factor cost	8,670	9,550	9,980	14,190	14,870	15,480
Net earned income from abroad	-20	-20	00	-50	-70	-80
Net national output at factor cost (national income)	8,650	9,530	9,980	14,140	14,800	15,400

The percentage distribution of the national income (net domestic product at factor cost) according to origin is shown in Table 54.

*Preliminary.

TABLE 54
SOURCES OF NATIONAL INCOME
(Percentage of total national income)

	1948-49	1950-51	1955-56	1960-61	1961-62	1962-63*
Agriculture (including forestry and fishery)	45.1	51.3	45.3	48.7	47.3	45.3
Mining, manufacturing and small enterprise	17.1	16.1	18.5	18.4	19.5	20.1
Commerce, transport and communication	13.5	17.7	18.9	16.6	16.8	17.0
Other services ..	15.5	15.1	17.3	16.7	17.2	18.1
Net earned income from abroad	-0.2	-0.2	0.0	-0.4	-0.5	-0.5

The share of Government (Government enterprises and Government administration—Central, State and local) in the generation of net domestic product at current prices is shown in the following table, both in total (crores of rupees) and percentage terms; the percentages are given in brackets.

TABLE 55
GOVERNMENT SHARE IN GENERATION OF NET DOMESTIC PRODUCT
(in crores of rupees)

Year	Net output of Government Sector		Total	Net output of Private Sector	Total net domestic product
	Enterprises	Administration			
1948-49	240 (2.8)	400 (4.6)	640 (7.4)	8,030 (92.6)	8,670
1950-51 ..	290 (3.0)	430 (4.5)	720 (7.5)	8,830 (92.5)	9,550
1955-56 ..	420 (4.2)	570 (5.7)	990 (9.9)	8,990 (90.1)	9,980
1960-61 ..	570 (4.0)	900 (6.4)	1,470 (10.4)	12,720 (89.6)	14,190
1961-62 ..	600 (4.0)	1,000 (6.7)	1,600 (10.7)	13,270 (89.3)	14,870
1962-63* ..	670 (4.3)	1,170 (7.6)	1,840 (11.9)	13,640 (88.1)	15,480

The share of Government in national expenditure is shown in the following table, both in total and percentage terms; the percentages are given in brackets.

TABLE 56
SHARE OF GOVERNMENT IN NATIONAL EXPENDITURE
(in crores of rupees)

Year	Current expenditure on commodities and services (administration)	Capital expenditure (administrative)	Capital expenditure (enterprises)	Total Government Expenditure	Net national expenditure at market price
1948-49 ..	640 (7.1)	100 (1.1)	110 (1.2)	850 (9.4)	9,060
1950-51 ..	560 (5.6)	100 (1.0)	170 (1.7)	830 (8.3)	10,030
1955-56 ..	720 (6.8)	220 (2.1)	350 (3.3)	1,290 (12.2)	10,660
1960-61 ..	1,140 (7.4)	350 (2.3)	430 (2.8)	1,920 (12.5)	15,330
1961-62 ..	1,260 (7.9)	380 (2.4)	570 (3.6)	2,210 (13.9)	16,140
1962-63* ..	1,570 (9.3)	460 (2.7)	750 (4.5)	2,780 (16.5)	16,840

*Preliminary.

SAVING

The volume and pattern of saving in the Indian economy for 1950-51 and for the years between 1955-56 and 1958-59, according to a study by the Reserve Bank of India, are given in Table 57.

TABLE 57
VOLUME AND PATTERN OF SAVING

(in crores of rupees)

	1950-51	1955-56	1956-57	1957-58	1958-59
Government sector	93.84	69.92	128.92	114.42	103.00
Domestic corporate sector ..	32.16	54.33	53.69	17.20	34.27
Household sector	509.88	785.98	810.36	686.55	837.57
Rural	189.93	175.56	214.40	205.08	242.36
Urban	319.95	610.42	595.96	481.47	595.21
Total Saving ..	635.88	910.23	992.97	818.17	974.84
Total saving as percentage of national income.	6.7	9.1	8.8	7.2	7.7

EMPLOYMENT

A precise estimate of the number of the unemployed in the country as a whole is still to be made. Employment exchange statistics cover mainly urban areas, and as yet only a portion of the unemployed actually register themselves with the exchanges.

The following table gives the occupational distribution of applicants on the Live Register of the Employment Exchanges as at the end of December 1963.*

TABLE 58
OCCUPATIONAL CATEGORIES AMONG APPLICANTS ON THE LIVE REGISTER OF THE EMPLOYMENT EXCHANGES (DECEMBER, 1963)

	Number	Percentage of Total
Professional, technical and related workers	1,15,006	4.6
Administrative, executive and managerial workers	3,599	0.1
Clerical, sales and related workers	74,000	2.9
Agriculture, dairy and related workers	10,150	0.4
Miners, quarrymen and related workers	6,478	0.3
Workers in transport and communications occupations ..	48,935	1.9
Craftsmen and production process workers	2,00,110	7.9
Service workers (e.g. cooks, chowkidars, sweepers, etc.) ..	84,735	3.4
Labourers with work experience not elsewhere specified ..	1,22,245	4.9
Persons without professional or vocational training or previous work experience	18,53,155	73.6
TOTAL	25,18,463	100.00

On the basis of the available data, the Planning Commission estimated that early in 1956 there were, roughly speaking, 53 lakh unemployed persons in the country, 25 lakhs in the urban areas and 28 lakhs in the rural areas.

Employment opportunities created during the Second Plan period fell short of the original target of matching new entrants to the labour force every year. The shortfall amounted to about 20 lakhs. Besides, the increase in the labour force during the Second Plan was larger than originally estimated by about 17 lakhs. The backlog of unemployment at the begin-

*For the number on the Live Register at the end of each year, see the chapter on 'Labour.' *Ad hoc* surveys have revealed that about 25 to 30 per cent of those registered with the employment exchanges are employed persons seeking better jobs.

ning of the Third Plan was thus estimated at about 90 lakhs. In addition there is a good deal of under-employment especially in the rural areas. According to the ninth to the twelfth rounds of the National Sample Survey conducted between May 1955 and August 1957, about 8 to 9 per cent of the employed population in urban areas and 10 to 12 per cent in rural areas worked on an average 42 hours or less per week and were available for additional employment. On this basis, the Planning Commission estimated the extent of under-employment in the country at 1.5 to 1.8 crores.

Some data relating to the addition to the labour force during the Third Plan as well as additional employment generated in the first two years of the Plan are given in the chapter on Planning.

PATTERN OF ECONOMY

Tangible Wealth of India

The Statistics Department of the Reserve Bank of India have made some estimates of the tangible wealth of India. The estimates, obtained by two different methods*, are based on various assumptions and sources of data. They are, therefore, essentially tentative and intended to be only as pointers to the broad magnitudes. Corresponding data for 1949-50 compiled by other pioneers* in the field are also given for purposes of comparison. The estimates of reproducible and total tangible wealth are reproduced in Table 59 together with the corresponding capital-output ratio. Table 60 gives the estimates of reproducible tangible wealth for various sectors in 1960-61 along with the figures for 1949-50.

TABLE 59
ESTIMATES OF TANGIBLE WEALTH IN INDIA

(Rs. in crores)

	1949-50	1960-61	
		Estimate I	Estimate II
A. Reproducible Tangible Wealth	17,020	32,160	35,360
B. Value of Land	17,850	20,240	20,240
C. Total Tangible Wealth	34,940	52,400	55,600
D. Ratio of Reproducible Tangible Wealth to Net Domestic Product	1.8	2.2	2.4
E. Ratio of Total Tangible Wealth to Net Domestic Product	3.7	3.6	3.8

TABLE 60
SECTOR-WISE BREAK-UP OF ESTIMATE OF TANGIBLE WEALTH
IN INDIA

(Rs. in crores)

Sector	Estimate of tangible wealth**	
	1949-50	1960-61
1. AGRICULTURE, ANIMAL HUSBANDRY AND ALLIED ACTIVITIES	5,236	8,783
1. Agricultural implements, including tractors	363	860
2. Livestock used in farms	2,428	2,702
3. Sheds, barns, etc.	880	1,366
4. Improvement of land and irrigation works :		
(i) Private	1,304	2,415
(ii) Public	229	1,365
5. Plantations other than tea plantations, etc:	20	35
6. Forestry and fishery	12	40

*For details, see "Reserve Bank of India Bulletin", January 1963, pp. 8-19.

**Depreciated replacement cost at current prices.

TABLE 60 (concl'd.)

Sector	Estimate of tangible wealth**	
	1949-50	1960-61
2. MINING AND MANUFACTURING (LARGE SCALE)	1,816	8,642
1. Mining	110	183
2. Electricity generation and transmission	240	1,174
3. Tea plantations	133	282
4. Other factory establishments :		
(i) Private	1,206	3,236
(ii) Public	127	767
3. SMALL ENTERPRISES	763	1,200
4. TRANSPORT AND COMMUNICATIONS	2,387	4,218
1. Railways	1,574	2,746
2. Communications	93	198
3. Vehicles	281	639
4. Transport animals	356	394
5. Shipping and navigation companies	18	135
6. Airways companies	17	42
7. Other transport companies	48	64
5. CAPITAL OUTLAY IN GOVERNMENT ADMINISTRATION	707*	1,810
6. TRADE AND COMMERCE	1,772	3,398
1. Wholesale and retail trade	1,704	3,260
2. Banks, co-operatives, insurance companies, etc.	68	138
7. HOUSE PROPERTY	4,405	7,113
1. Urban : private	2,644	4,381
2. Rural : private	1,761	2,732
8. REPRODUCIBLE TANGIBLE WEALTH	17,086	32,164
9. VALUE OF LAND	17,854	20,241
10. TOTAL TANGIBLE WEALTH	34,940	52,405

Land Holdings—Rural Sector

Some results of the survey on land holdings carried out in the eighth round of the National Sample Survey (July 1954-April 1955) have been presented in five reports (NSS Reports Nos. 10, 30, 36, 66 and 74). According to the fifth report (NSS Report No. 74) published in 1963, the total number of operational holdings in rural India was estimated at about 6.2 crores, commanding a total area of 33.6 crore acres with an average size of 5.43 acres. The average size, however, showed considerable zonal** variation from 3-4 acres in North, East and South to 9-10 acres in West, Central and North-West zones.

About 5 per cent of the holdings and 9 per cent of the area were under joint operation. Individually operated holdings accounted for the bulk; in South zone these comprised 98 per cent of the holdings in the zone.

One-fifth of the land operated was taken on lease under various forms of tenancy with different modes of paying the rent. The proportion ranged from one-tenth in North to one-fourth in North-West.

About 72 per cent of the holdings were fully or partially used for agricultural purposes. The agricultural holding was of an average of 7.53 acres varying from 4.31 in East to 13.44 in Central India.

The average operational holding was in five fragments (a fragment being a distinct and exclusive piece of land separated from any other piece

*Total of estimates for 'roads & bridges', 'public & semi-public capital in ports, docks, light houses etc.', 'public capital in aerodromes and aerodrome equipments' and 'public house property.'

**For the purpose of the survey, the population zones are as follows: North India—U.P.; East India—Bihar, Orissa, W. Bengal, Assam, Manipur and Tripura; South India—Travancore-Cochin, Coorg, Andhra, Madras and Mysore; West India—Bombay, Saurashtra and Kutch; Central India—Madhya Pradesh, Madhya Bharat, Hyderabad, Bhopal and Vindhya Pradesh; and North-West India—Rajasthan, Punjab, Pepsu, J & K, Ajmer. Delhi and Himachal Pradesh.

covered by the holding). In North and East, it was generally constituted of seven and in South of three fragments.

Permanent farm servants were 136 per thousand operational holdings excluding those of sizes under 0.005 acre, the maximum number being 255 in Central India.

Table 61 gives a consolidated account of some findings of the survey.

TABLE 61
LAND HOLDINGS—RURAL SECTOR

NOTE—Figures in brackets have been obtained by excluding holdings of sizes less than 0.005 acre.

Population Zone	North	East	South	West	Central	North-west	All India
Total No. of operational holdings ('000)	1,10.52 (1,04.67)	1,61.85 (1,56.49)	1,30.30 (1,14.09)	57.89 (44.82)	96.62 (81.13)	60.62 (48.92)	6,17.80 (5,50.12)
Total area operated ('000 acres)	4,11.71	5,43.07	4,31.92	4,98.84	8,82.87	5,88.70	33,57.11
Average size (acres)	3.73 (3.93)	3.36 (3.47)	3.31 (3.79)	8.62 (11.13)	9.14 (10.88)	9.71 (12.03)	5.43 (6.10)
Percentage of :							
(i) holdings below average size	66.15 (65.95)	66.37 (66.09)	72.11 (71.00)	70.03 (68.12)	70.40 (69.41)	70.42 (69.40)	72.72 (72.03)
(ii) area under such holdings	19.48 (21.13)	16.83 (17.69)	13.71 (16.36)	15.61 (21.53)	15.28 (19.42)	18.76 (24.20)	17.06 (19.55)
Percentage of holdings* :							
(i) entirely owned	72.80	60.21	53.26	61.69	52.82	59.77	60.15
(ii) entirely leased in	5.83	18.53	24.92	16.96	16.61	17.52	16.94
(iii) mixed	21.37	21.26	21.82	21.35	30.57	22.71	22.91
Percentage of :							
(i) agricultural to total holdings	76.53	77.03	65.48	67.59	67.63	73.39	71.79
(ii) area under agricultural holdings to total operated area	99.24	98.88	99.63	99.91	99.48	99.76	99.49
Average size of :							
(i) agricultural holdings (acres)	4.83	4.31	5.04	12.74	13.44	13.20	7.53
(ii) non-agricultural holdings (acres)	0.12	0.16	0.04	0.02	0.15	0.09	0.10
Percentage of :							
(i) agricultural holdings below average size	67.45	65.89	71.06	67.37	68.47	69.54	72.29
(ii) area under such holdings	28.94	25.79	24.05	25.68	25.49	27.47	25.48
Area under agricultural holdings ('000 acres)	4,08.57	5,37.00	4,30.33	4,98.40	8,78.32	5,87.31	33,39.93
Total area irrigated ('000 acres)	1,38.97	82.97	1,04.67	25.98	46.51	95.93	4,95.03
Percentage of area irrigated by :							
(i) canal	35.19	25.62	32.17	18.48	28.06	39.85	32.31
(ii) tank	10.67	25.94	33.18	2.85	38.66	2.21	18.57
(iii) well	45.90	4.71	22.09	72.40	27.87	41.78	32.86
(iv) other sources	7.75	43.17	11.14	5.81	5.20	15.95	15.65
(v) unspecified	0.49	0.56	1.42	0.46	0.21	0.21	0.61

Land Utilisation

The NSS conducted a survey of land utilisation and crop-cutting experiments, in the fourteenth round (July 1958-June 1959). Some results of the survey are detailed in the NSS Report No. 73. According to it, India (excluding some hilly and forest areas in Assam, Manipur and Tripura and Ladakh district of Jammu and Kashmir) had an estimated gross** area of

*Excludes holdings of sizes below 0.005 acre.

**Gross area under a crop consists of the area under the crop (i) grown singly, plus (ii) grown in mixture. Thus the total of the gross areas under several crops may exceed the geographical area under these crops.

nearly 25.9 crore acres under seven major cereal crops in the autumn, winter and spring seasons of 1958-59. Table 62 gives the break-up of the area under the different crops by administrative zones*.

TABLE 62
ESTIMATED GROSS AREA UNDER MAJOR CEREAL CROPS

Administrative Zone	(in thousand acres)							Total
	Rice	Jowar	Lajra	Ragi	Maize	Wheat	Barley	
1. North	19,76	39,70	1,69,35	—	51,12	1,07,97	23,98	4,11,88
2. Central	1,98,79	1,18,28	46,14	1	51,36	2,15,59	89,17	7,20,04
3. East	3,94,79	65	87	11,88	25,70	25,81	22,85	4,82,55
4. South	1,71,93	1,16,09	43,48	22,13	7,84	80	—	3,62,27
5. West	81,21	3,28,51	1,13,74	36,50	9,28	41,90	53	6,11,67
All India	8,66,48	6,03,23	3,74,28	70,52	1,45,30	3,92,07	1,36,53	25,88,41

Tilling Methods and Rural Amenities

Data on some socio-economic aspects of the Indian villages have been obtained from the tenth to the twelfth rounds (December 1955-August 1957) of the National Sample Survey. According to these, 64 to 67 per cent of all the villages had a population below 500, whereas the number of villages with a population above 2,000 constituted between 4.2 and 5.6 per cent of all villages. The villages with a population between 501 and 1,000 constituted 19 to 21 per cent and those with above 3,000 constituted between 1.7 and 2.4 per cent.

In about 97 per cent of the villages tilling was done with the help of animals. Only 0.4 to 0.9 per cent of the villages had the power-driven system, whereas in 1.3 to 2.3 per cent of the villages the mixed system prevailed. Non-chemical manures (cowdung, green manures, composts, etc.) were used in 64 per cent and 75 per cent, respectively, of the villages in the twelfth and eleventh rounds, whereas chemical manures were used in only 0.1 per cent villages for each round.

Chemical as well as non-chemical manures were used in 29 and 21 per cent, respectively, of the villages in these two rounds. About 22 per cent of the villages received water from wells, 10 to 12 per cent received canal and river water, 6 to 8 per cent from tanks and a few others from tubewells and anicuts. In about 21 per cent of the villages, the mixed system of irrigation was in vogue. Thirty-four to 36 per cent of villages had none of these systems and probably had to depend on the rains.

The thirteenth round was conducted during September 1957 to May 1958, with the main object of collecting data on some basic amenities of life. The following table shows the average distances of certain amenities from the villages.

TABLE 63
AVERAGE DISTANCE IN MILES FROM VILLAGES TO IMPORTANT AMENITIES (DECEMBER 1955—MAY 1958)

	Tenth round	Eleventh round	Twelfth round	Thirteenth round
Primary school	1.3	1.4	1.2	—
Post office	4.0	3.8	3.6	—
Police station	7.6	8.2	—	7.0
Hospital	9.0	8.8	8.6	6.9
High school	10.5	10.2	10.0	7.3
Telephone office	11.5	11.5	11.1	8.8
Railway station	20.5	20.2	—	—

*The States which were included in the various administrative zones for the purpose of the study are : North India—Rajasthan, Punjab, J & K, Delhi and Himachal Pradesh; Central India—U. P. and Madhya Pradesh; East India—Bihar, Orissa West Bengal, Assam, Manipur and Tripura; South India—Andhra, Madras and Kerala; and West India—(former) Bombay and Mysore.

According to the thirteenth round, fair weather roads connected 14.4 per cent of villages to the nearest high school, 15.4 per cent to the hospital and 13.2 and 17 per cent to the nearest telegraph office and police station respectively. For all-weather roads, the percentages of villages were 35.1, 36.4, 31.5 and 38 respectively. Others, including mixed type and river and canal links, connected 45 per cent of villages to the nearest high school, 43 per cent to the nearest hospital, 52.1 per cent to the telegraph office and 41 per cent to the nearest police station.

The percentage of villages with radio facilities was 11.6 in the eleventh round and 15 in the thirteenth. The percentage for public libraries had also increased from 7.1 to 9. In the eleventh and twelfth rounds, about 19 per cent of the villages had a weekly or daily newspaper coming into them. Under the thirteenth round, data were collected separately for the two categories of papers; 14.7 per cent received a daily newspaper and 13.5 per cent a weekly.

The thirteenth round shows that private chambers constituted nearly 68 per cent of all medical institutions in villages. Next in importance were dispensaries. Hospitals accounted for only 5 per cent of all the medical institutions. However, a private chamber attended on an average to only five patients per day, a dispensary to 18 and a hospital to 54 patients per day. Nearly one-third of the total number of doctors in villages were allopaths, the rest being homoeopaths, hakims, vaid, etc.

Housing Pattern

Results of the twelfth round of the National Sample Survey (March-August 1957) on housing conditions in rural and urban areas show that about 73 per cent of the households in the rural area and 76 per cent in the urban area possessed not more than two rooms each. About 44 per cent rural households and 76 per cent of the households in big cities like Calcutta, Bombay, Delhi and Madras, and 54 per cent in other big towns lived in one room.

The percentage of households with four or more persons per room in the rural areas was about 20 and in the urban areas about 17. In the cities of Bombay, Calcutta, Delhi and Madras about 21 per cent of the households had to accommodate four or more persons per room. In both rural and urban areas about half of the households occupied floor-space between 101 and 300 square feet, this being the most numerous floor-space group in the rural as well as urban areas. The percentage of households with per capita floor-space up to 50 square feet was 44 in the rural and 47 in the urban areas.

About 69 per cent of the rural households had drinking water from tanks and ponds and 12 per cent from tubewells; tap water was almost unknown to rural areas. In the urban sector, 92 per cent of households in the four big cities, 86 per cent in the big towns and about 39 per cent in small towns had drinking water from municipal taps. Nearly 47 per cent of the total number of urban households did not get any municipal tap water, and about 31 per cent of the households had to depend for their supply of drinking water on tanks and ponds.

A built-up latrine was used by only 3 per cent of the rural households, either in exclusive or common use with other households. In the urban sector, 44 per cent of the households did not use any built-up latrine, about 37 per cent used it in common, whereas only 19 per cent had a latrine for individual household use.

Labour Force

According to the fourteenth round of the National Sample Survey, conducted between July 1958 and June 1959, labour force in the urban

areas constituted 33 per cent of the population, both male and female, comprising 31.8 per cent gainfully employed and 1.2 per cent unemployed. Those not in labour force (students, house workers, too young, too old and others) accounted for 65.8 per cent, while 1.2 per cent were not recorded. About 81.6 per cent of the labour force were found to have no technical education. Of the gainfully employed, nearly 54 per cent were employees, 1.3 per cent employers, 34.2 per cent own account workers and 10.5 per cent unpaid family enterprise workers. On an average, gainfully employed persons in urban areas work for 5.8 days in principal occupation in a week.

In rural areas,* persons (male and female) in labour force represented 42.7 per cent of population, comprising 41 per cent gainfully employed and 1.7 unemployed. Persons not in labour force constituted 57.2 per cent of the population; 0.1 per cent were not recorded. The main bulk (81.4 per cent) of the employed were engaged in agriculture and livestock, 6.8 per cent in manufacturing (mainly of food, beverage, tobacco and textiles), 4.4 per cent in educational, medical, public, personal and other services, 2.4 per cent in trade and commerce, and the rest in forestry, fishing, construction, mining, transport and other occupations.

Expenditure Pattern

According to the preliminary results of the fifteenth round of National Sample Survey, conducted between July 1959 and June 1960, consumer expenditure** in rural areas per person per year (365 days) works out to about Rs. 247; the corresponding figure for the urban areas was Rs. 334.6. The average household size in rural areas was 5.2 and in urban areas 4.8.

The expenditure on food articles in rural areas constituted about 69.2 per cent of the total consumer expenditure, while in respect of the urban areas this percentage was 61.4. Other important items of expenditure were clothing (8 per cent of the total consumer expenditure in rural areas and 6.2 per cent in urban areas) and fuel and light (5.9 per cent in rural areas and 6.3 per cent in urban areas).

The average expenditure on clothing per year (365 days) was about Rs. 19.7 per person for rural areas and Rs. 20.7 per person for urban areas.

In the fifteenth round households in the rural and urban areas were classified according to per capita monthly expenditure classes. The percentage distribution of households in the rural and urban areas of the country according to per capita monthly expenditure classes is indicated in Table 64.

TABLE 64
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY EXPENDITURE (JULY 1959—JUNE 1960)

Per capita expenditure per month (in rupees)	Percentage of total number of households	
	Rural	Urban
0—8	6.5	2.2
8—11	12.5	6.1
11—13	10.4	5.8
13—15	10.2	6.7
15—18	14.5	11.2
18—21	10.8	10.6
21—24	7.9	7.5
24—28	7.3	8.1
28—34	8.6	10.4
34—43	5.6	10.0
43—55	2.7	8.0
55 and above	3.0	13.4

*The data are based on the third of the six sub-rounds conducted in the rural areas.

**Details of consumer expenditure pattern are given in NSS Draft Report No 97.

Consumer Expenditure Patterns in Villages, Towns and Cities

According to the fifteenth round of the National Sample Survey, the consumer expenditure per person per month (30 days) in the villages (including the imputed value of supplies obtained in kind) was Rs. 20.30; in urban areas it was Rs. 27.5 and the average for Calcutta, Bombay, Madras and Delhi was Rs. 40.4.

The patterns of consumption in the rural and urban areas were also different. While about 42.4 per cent of the expenditure in the villages was on foodgrains, the proportion for the towns was 24.6 per cent and for the four major cities 15.5; the percentages of expenditure on all food articles were much higher as seen above. The actual expenditure on food in absolute terms was, however, higher in the cities than in the towns and villages. The expenditure on fuel and light was the lowest in the villages and the highest in the cities, although their proportion to the total expenditure was more or less the same for all the three categories.

The expenditure on the rest of the items, particularly on education, services and taxes, showed a gradual rise as one proceeded from the villages through the towns to the cities. The pattern of expenditure for the country as a whole approximates to that in the villages because of the preponderance of villages in the country.

Middle-Class Income and Expenditure

The income-distribution and expenditure-pattern of middle-class families, in four major cities, based on the Middle-Class Family Living Survey, 1958-59, are given in Tables 65 and 66.

TABLE 65
DISTRIBUTION OF MIDDLE-CLASS FAMILIES BY INCOME (1958-59)

Monthly income group (in Rs.)	Percentage of families in each income group to the total number of families			
	Bombay	Calcutta	Delhi	Madras
0-75	0.2	1.0	0.5	2.5
75-100	1.2	3.4	1.9	9.4
100-150	10.8	13.8	12.5	19.4
150-200	16.0	16.6	19.7	18.6
200-300	27.5	22.5	25.2	21.2
300-500	26.4	21.4	24.7	18.4
500-750	9.5	11.2	7.9	5.0
750-1000	4.0	4.6	3.2	2.2
1000-1500	3.2	3.5	2.5	1.5
1500 and above	1.3	1.9	2.0	1.8

TABLE 66
AVERAGE MONTHLY EXPENDITURE PER FAMILY ON VARIOUS GROUPS OF ITEMS (1958-59)

	Expenditure (in rupees)*			
	Bombay	Calcutta	Delhi	Madras
Food, beverages, tobacco and intoxicants	147.9 (38.8)	149.2 (42.1)	158.1 (40.7)	136.3 (42.1)
Fuel and light	14.2 (3.7)	12.9 (3.6)	14.3 (3.7)	14.5 (4.5)
Housing, household requisites and services	52.9 (13.9)	66.5 (18.8)	55.8 (14.4)	47.5 (14.7)
Clothing, bedding, head-wear and foot-wear	45.5 (12.0)	31.3 (8.9)	57.5 (14.8)	38.6 (11.8)
Miscellaneous	120.5 (31.6)	94.4 (26.6)	102.7 (26.5)	87.4 (27.0)
TOTAL ..	380.9 (100.0)	354.3 (100.0)	388.3 (100.0)	324.1 (100.0)

*Figures in brackets represent percentages to total expenditure.

Prices

The movement of wholesale prices in India over recent years may be seen from Table 67 compiled by the Union Ministry of Industry.

The decline in agricultural production and the consequent scarcity of supplies of consumables had begun to exert upward pressure on prices during the early months of 1963. The tendency continued throughout the year; even normal seasonal tendency for wholesale prices in general to decline over the second half of the fiscal year was not in evidence. The rise in the price level has thus been a matter of major concern.

The Government sought to meet the situation by limiting the scale of deficit financing and avoiding large increases in indirect taxation, in the 1963-64 budget, on domestically produced items of mass consumption. The compulsory deposit scheme was withdrawn from September 1963 in the case of non-income tax payers. Pensions were increased and the terms of Family Pension Scheme for Government employees were liberalised in addition to compensation for rise in the cost of living. Apart from these, larger imports of rice were arranged, and larger quantities of rice and wheat were released from Central stocks to scarcity affected States, and the number of fair price shops was increased.

In view of the expected larger crop of rice, Government decided to step up procurement to build up a substantial stock. State Governments were advised to stipulate margins to be maintained by traders and regulate trading practices through more effective supervision and inspection of trade transactions. Restrictions were imposed on the movement of cotton in some areas and imports were arranged. In the case of sugar, price and distribution controls were reimposed in April 1963.

It is, however, recognised that apart from the remedial measures, the primary approach to price stability has to be in terms of stimulating production and productivity.

TABLE 67
INDEX NUMBER OF WHOLESALE PRICES

(Base : 1952-53=100)

Year	Food Arti- cles	Liquor and Tobacco	Fuel, Power, Light & Lubri- cants	Indus- trial Raw Mate- rials	Manufactured Articles			General Index
					Inter- mediate	Finish- ed	Comb- ined	
1955-56 ..	86.6	81.0	95.2	99.0	100.1	99.6	99.7	92.5
1960-61 ..	120.0	109.9	120.0	145.4	130.6	122.8	123.9	124.9
1961-62 ..	120.1	100.3	122.1	142.6	138.8	124.6	126.6	125.1
1962-63 ..	126.1	100.9	124.4	136.5	139.5	127.1	128.8	127.9
1963-64 ..	136.8	119.6	139.6	139.5	139.6	129.7	131.1	135.3
Dec. 1962	122.8	99.5	124.2	133.9	137.1	127.2	128.6	125.8
March 1963	123.4	114.2	135.7	135.2	136.3	128.0	129.6	127.2
June 1963	134.8	119.2	139.9	138.7	139.0	129.1	130.5	134.0
Sept. 1963	139.1	118.5	139.8	141.2	139.4	129.8	131.2	136.7
Dec. 1963	136.1	121.6	139.3	138.7	138.8	129.6	130.9	134.9
March 1964	142.1	119.0	141.7	144.9	144.7	130.9	132.8	139.3

Consumer Prices

The all-India working class consumer price index was up by 4 per cent in November 1963 as compared to a year earlier. Table 68 shows the working class consumer price indices for 1950-51, 1956-57, and 1960-61 to 1962-63 as well as for the months of December 1962 and March, June, September and November 1963.

TABLE 68
WORKING CLASS CONSUMER PRICE INDICES
(Base shifted to 1949=100)

Year	All-India	Bombay	Calcutta	Delhi	Madras
1950-51	101	103	101	102	101
1956-57	107	116	102	112	113
1960-61	124	137	113	121	146
1961-62	127	142	115	128	149
1962-63	131	145	121	130	150
Dec. 1962	131	143	121	128	151
March 1963	131	143	123	132	149
June 1963	134	145	128	132	150
Sept. 1963	137	148	116*	136	152
Nov. 1963**	138	148	116*	138	155

*For Calcutta, the old series was discontinued from June 1963 and a new series started with base 1960=100.

**Provisional.

What happens

when lightning strikes a transmission tower?

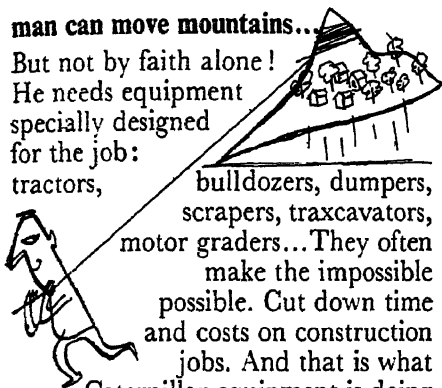
Imagine a city with its power supply cut off! No lights, no air-conditioning, no electric trains or trams! No factories and mills. No theatres... That is what happens, unless electrical systems are adequately protected — by switchgear, control and relay panels. L&T has a wide range of equipment vital to many aspects of the electrical networks from the generation of power to its control and distribution!

man can move mountains...

But not by faith alone!

He needs equipment specially designed for the job:

tractors, bulldozers, dumpers, scrapers, traxcavators, motor graders... They often make the impossible possible. Cut down time and costs on construction jobs. And that is what Caterpillar equipment is doing — helping to build giant dams for hydro-electric projects all over India.



force of water or steam to drive huge generators.

next time when the power fails...

Be thankful the fuse had done its job! Prevented an accident in your house, perhaps — or saved costly equipment from damage. And in large factories, switchgear performs the same function. Cuts off power when it must — and protects equipment worth millions of rupees! Ensures at other times an unbroken flow of current — and prevents loss of vital production time!

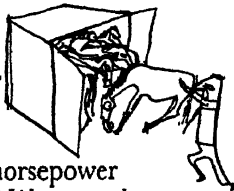


50,000 horses on the job:

That is right.

Not the horses — but the power they represent.

A turbine can develop 50,000 horsepower and much more! Water and steam turbines manufactured by the world-renowned German firms of VOITH and GHH can convert the



guardian angel?

Yes! That's what control and relay panels are. They prevent burning out of giant generators and transformers — avoid damage that might run into crores! L&T designs and manufactures equipment of this type — veritably watchdogs of electrical networks!



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CHAPTER XIII

PLANNING

Planning was advocated in India much before independence, by individuals, groups, the Congress Party as well as the Government. A number of committees had been set up and proposals made for post-war reconstruction and development. It was, however, after independence that the Government of India set up the Planning Commission in March 1950, to prepare a plan for the "most effective and balanced utilisation of the country's resources". The First Five Year Plan, finalised in the light of public discussion, was submitted to Parliament in December, 1952.

Objectives

The central objective of planning was defined as initiating "a process of development which will raise living standards and open out to the people new opportunities for a richer and more varied life". Economic planning has to be viewed as "an integral part of a wider process aiming not merely at the development of resources in a narrow technical sense, but at the development of human faculties and the building up of an institutional frame-work adequate to the needs and aspirations of the people".

The long-term objectives of doubling the national and per capita incomes (from the levels obtaining at the beginning of the First Plan) and raising the consumption standards were laid down in the First and Second Plans*, which were based on certain assumptions and prevailing conditions. In view of the very rapid growth of population in the 1951-61 decade, and the likely trends, the Third Plan lays down the following long-term objectives to be attained by 1975-76 : (i) a cumulative rate of growth as near as possible to 6 per cent per annum so as to secure more than a doubling of national income (from Rs. 14,500 crores in 1960-61 to Rs. 34,000 crores in 1975-76 at 1960-61 prices) and a 61 per cent increase in per capita income (from Rs. 330 in 1960-61 to Rs. 530 in 1975-76)**; (ii) the creation of employment outside agriculture for more than 4.6 crore persons so as to reduce the proportion of population dependent on agriculture from about 70 per cent to about 60 per cent; and (iii) the provision of universal education up to the age of 14 as envisaged in the Constitution.

A principal objective to be firmly kept in view is to stabilise the growth of population over a reasonable period. The step-up in the net investment rate has to be from about 11 per cent of national income at the end of the Second Plan to 14-15 per cent, 17-18 per cent and 19-20 per cent per annum by the end of Third, Fourth and Fifth Plans, respectively. The major part of the increase in investment will have to be financed by domestic savings; the net saving-income ratio will have to rise from about 8.5 per cent in 1960-61 to about 11.5 per cent, 15-16 per cent and 18-19 per cent at the end of Third, Fourth and Fifth Plans, respectively.

Another objective is to ensure that the economy can, after a period of ten years or so, reduce substantially dependence on assistance from abroad. This also postulates a steady and sizable increase in exports through appropriate policies and measures.

FIRST AND SECOND PLANS

The First Five Year Plan (1951-52 to 1955-56), through its emphasis on agriculture, irrigation, power and transport, aimed at creating the base

*For more details, see "India 1962", p. 175.

**National and per capita income figures given in this chapter differ somewhat from those given in the chapter on 'Economic Structure', which are based on later computations.

for more rapid economic and industrial advance in the future. It also initiated some of the basic policies by way of social change and institutional reforms. The Second Plan (1956-57 to 1960-61) carried these policies a step further and placed before the nation the goal of socialist pattern of society. It laid emphasis on the development of basic and heavy industries and defined the key role which the public sector was to play in the economic development of the country.

Investment during the two Plans totalled Rs. 10,110 crores—Rs. 5,210 crores in the public sector* and Rs. 4,900 crores in the private sector—increasing the average annual level of investment in the economy from Rs. 500 crores at the beginning of the decade to Rs. 1,600 crores at its end.

Programmes for agriculture and irrigation took up 31 and 20 per cent of public sector outlay in the First and Second Plans, respectively. With the Second Plan shift of emphasis to industries, the share of industries and minerals was increased from 4 per cent in the First to 20 per cent in the Second Plan. For power, the allocations in the two Plans were 13 and 10 per cent. Transport and communications received equally high priority in both Plans, accounting for 27 and 28 per cent, while social services and miscellaneous took up 23 and 18 per cent of the outlays in the First and Second Plans.

Of the public sector outlay, Rs. 1,772 crores, or 90 per cent of the total of Rs. 1,960 crores in the First Plan, and Rs. 3,510 crores**, or 76 per cent of the outlay of Rs. 4,600 crores in the Second Plan, came from internal resources; the remaining comprised external assistance†.

During the Second Plan in particular, there was a substantial step-up in the tax effort. A number of new direct and indirect taxes were introduced. The gap in resources was made up through partly deficit financing and partly external assistance. Deficit financing during the Second Plan was roughly of the order of Rs. 948 crores.

Over the period of the first two Plans (1951—1961), national income is estimated to have increased by 42 per cent. Per capita income increased by about 16 per cent only, owing to a rapid population growth.

The national income figure, however, does not adequately indicate the actual growth potential built up in the economy. Even the striking rise in the index of industrial production of about 95 per cent (average annual rate of about 9.5 per cent) does not reflect fully the extent of industrialisation that has taken place; for the index does not take into account the output of all new industries as well as the qualitative changes. In fact the decade has witnessed the beginning of an industrial revolution. Particularly in the five years of the Second Plan, the growth and diversification of industry have been remarkable. The main achievements during the decade are presented in Table 72 along with the targets and a mid-term appraisal of achievements of the Third Plan.

The industrial advance and the growth-rate in national income could have been greater but for certain limiting factors: (i) agricultural growth-rate was discontinuous and was not adequate for supporting a higher rate of industrial growth as well as for increasing exports; (ii) the execution of some of the power projects as also the new fertiliser projects and the heavy chemical project had to be delayed because of foreign exchange difficulties; (iii) India's exports over the decade were stagnant, partly due to the fact that the programme for exports had not been regarded as an integral part of the Five Year Plans; (iv) some avoidable delays occurred in the formulation as well

*The public sector also incurred Rs. 1,350 crores on current outlay.

**Includes subscriptions to Government loans by (i) Reserve Bank, and (ii) State Bank out of PL 480 deposits.

†External assistance in the Second Plan was Rs. 1,090 crores including investment of PL 480 funds in special securities by Reserve Bank in 1960-61.

as the execution of certain projects both in the industrial and the agricultural spheres because of administrative inadequacies. The Third Plan emphasises these and other limiting factors and suggests determined action with regard to them.

THIRD FIVE YEAR PLAN

Objectives

The Third Five Year Plan (1961-62 to 1965-66) has been formulated keeping in view the long-term objectives for the next fifteen years which have already been described. Its immediate aim is : (i) to secure an increase in national income of over 5 per cent per annum, and at the same time ensure a pattern of investment so as to sustain this rate of growth during subsequent Plan periods; (ii) to achieve self-sufficiency in foodgrains and increase agricultural production to meet the requirements of industry and exports; (iii) to expand basic industries like steel, chemicals, fuel and power, and establish machine-building capacity, so that the requirements of further industrialisation can be met within a period of ten years or so mainly from the country's own resources; (iv) to utilise to the fullest possible extent the manpower resources of the country and to ensure a substantial expansion in employment opportunities; (v) to establish progressively greater equality of opportunity and to bring about reduction in disparities in income and wealth and a more even distribution of economic power. National income would increase by about 30 per cent from Rs. 14,500 crores in 1960-61 to about Rs. 19,000 crores by 1965-66 (at 1960-61 prices); per capita income would rise by about 17 per cent from Rs. 330 in 1960-61 to about Rs. 385 in 1965-66.

Outlay and Allocations

The total cost of the physical programmes in the Third Plan, which include certain measures in preparation for the Fourth Plan, exceeds Rs. 8,000 crores for the public sector and is Rs. 4,100 crores* (estimated) for the private sector. The estimate of financial resources for the public sector, however, was placed at Rs. 7,500 crores. The following table shows the distribution of this financial outlay by major heads (the corresponding expenditure during the Second Plan is also shown for comparison).

TABLE 69
DISTRIBUTION OF PUBLIC SECTOR OUTLAY BY MAJOR HEADS

	Second Plan		Third Plan	
	Total expenditure (Rs. crores)	Per cent	Total provision (Rs. crores)	Per cent
Agriculture and community development	530	11	1,068	14
Major and medium irrigation	420	9	650	9
Power	445	10	1,012	13
Village and small industries	175	4	264	4
Organised industry and minerals	900	20	1,520	20
Transport and communications	1,300	28	1,486	20
Social services and miscellaneous	830	18	1,300	17
Inventories	—	—	200	3
TOTAL	4,600	100	7,500	100

*Excludes Rs. 200 crores, estimated transfer from the public to the private sector.

Of the total outlay of Rs. 7,500 crores in the public sector, investment (in the sense of expenditure on capital account) is estimated at Rs. 6,300 crores and current outlay at Rs. 1,200 crores. This does not include contribution in cash or kind made by the people towards the execution of local development works or the contribution of local bodies out of their own resources.

The investment by the private sector during the period of the Third Plan is estimated at Rs. 4,100 crores, thus making a total investment in the public and private sectors together of Rs. 10,400 crores. The break-up of the public and private sector investments under major heads of development is given below, the corresponding investment during the Second Plan being also shown side by side for comparison.

TABLE 70
INVESTMENT IN SECOND AND THIRD PLANS

(in crores of rupees)

	Second Plan				Third Plan			
	Public sector	Private sector	Total	Per cent	Public sector	Private sector	Total	Per cent
Agriculture and community development	210	625	835	12	660	800	1,460	14
Major and medium irrigation ..	420	*	420	6	650	*	650	6
Power ..	445	40	485	7	1,012	50	1,062	10
Village and small industries ..	90	175	265	4	150	275	425	4
Organised industry and minerals ..	870	675	1,545	23	1,520	1,050	2,570	25
Transport and communications	1,275	135	1,410	21	1,486	250	1,736	17
Social services and miscellaneous ..	340	950	1,290	19	622	1,075	1,697	16
Inventories	—	500	500	8	200	600	800	8
TOTAL	3,650	3,100*	6,750	100	6,300	4,100**	10,400	100

The manner of financing the public sector outlay of Rs. 7,500 crores would be as shown in the following table. The corresponding position for the Second Plan is also shown alongside.

*Included under agriculture and community development.

**Excludes transfers from the public to the private sector.

TABLE 71
FINANCING OF PLAN OUTLAY (THIRD PLAN)

(in crores of rupees)

	Second Plan (1956-61) estimated	Third Plan (1961-66)		
		Centre	States	Total
1. Balance from current revenues (on the basis of existing taxation)	—50	410	140	550
2. Contribution of Railways	150*	100	—	100
3. Surpluses of other public enterprises	**	300	150	450
4. Loans from the public (net)	780†	475	325	800
5. Small savings (net)	400	213	387	600
6. Provident funds (net); steel equalisation fund (net) and balance of miscellaneous capital receipts over non-Plan disbursements	230	716	—176	540
7. Additional taxation, including measures to increase surpluses of public enterprises	1,052	1,100	610	1,710
8. Budgetary receipts corresponding to external assistance	1,090††	2,200	—	2,200
9. Deficit financing	948	524	26	550
TOTAL ..	4,600	6,038	1,462	7,500

The backlog of unemployment at the beginning of the Third Plan was roughly estimated at 90 lakhs. Another 1.5 to 1.8 crores were under-employed. The addition to the labour force may be of the order of 1.7 crores during the Third Plan. The Plan, however, visualises increase in employment to the extent of only 1.4 crores—about 35 lakhs in agriculture and about 1.05 crores outside agriculture. There may also be some reduction in under-employment during the Third Plan. Thus, even to provide employment to all new entrants to the labour force, there is need to create additional employment opportunities for 30 lakh persons. This is considered to be an essential objective in the Third Plan. It is, therefore, proposed that (i) efforts should be made to spread out employment more widely and evenly than in the past; (ii) a fairly large programme of rural industrialisation should be undertaken with emphasis on rural electrification, development of rural industrial estates, promotion of village industries and effective re-deployment of manpower; and (iii) a rural works programme should be organised to provide work for an average of about 100 days in the year for 25 lakh persons or more.

Progress of the Third Plan

The report on the progress of the Third Plan during 1961-62 to 1963-64 is embodied in *The Third Plan, Mid-Term Appraisal*. The Planning Commission undertook the appraisal to bring to focus such aspects of Plan implementation as required special attention for achieving more rapid progress in the remaining two years. The report highlights the fact that the rate of growth of the economy and the increase in employment has been slow in the first half of the Plan period. While performance in some sectors like transport, power and education has been in accordance with the Plan

*Inclusive of increased fares and freights.

**Included in items 1 and 6 of the table.

†Includes investment by the State Bank of India out of PL 480 funds.

††Includes investment of PL 480 funds by the Reserve Bank of India in special securities in 1960-61.

or ahead of schedule, it is likely that targets in some fields, such as machine tools, aluminium, cloth, coal, steel, iron ore, cement, fertilisers, irrigation, cotton, oil-seeds and foodgrains may not be achieved.

In November 1963, the National Development Council considered and broadly agreed with the findings and recommendations contained in the appraisal report, and decided that the Central and State Governments should urgently take steps to remove the deficiencies and ensure the realisation of the objectives and targets of the Third Plan. It also proposed necessary action to be taken in various fields, with emphasis on agriculture, land reform, raw material supply, elementary needs of people, improvement of machinery for planning and of administrative efficiency and strengthening of Plan implementation.

The Central Government also considered and generally approved of the suggestions in the report. Several concrete steps have since been taken and more are expected to be taken shortly to overcome the shortcomings.

The Third Plan targets of production and development, and achievements during the first two years of the Plan, in physical terms, in respect of some important items are shown in Table 72. Data for 1950-51, beginning of the First Plan, 1955-56, end of the First Plan, and 1960-61, end of the Second Plan, are also given for comparison.

Table 73 sets out the pattern of Plan outlay† and progress of expenditure for 1961-62 to 1963-64 by major heads of development.

TABLE 72

ACHIEVEMENTS OF FIRST TWO PLANS AND PRINCIPAL TARGETS AND MID-TERM ACHIEVEMENTS OF THIRD PLAN

Note : The data have been converted from the original inch-pound to metric system on the basis of simple conversion factors.

	Achievements					Targets 1965-66
	1950-51	1955-56	1960-61	1961-62	1962-63	
Index number of agricultural production (1949-50=100)	95.6	116.8	139.7*	141.4*	136.8*	176
Foodgrain production (lakh tonnes)	5,49.2**	6,68.5	8,09.7***	8,10.4***	7,87.5†	10,16
Nitrogenous fertilisers consumed (thousand tonnes of nitrogen)	56	1,07	2,03	2,84	3,56	10,16
Co-operation: short and medium term loans advanced (Rs. crores)	22.9	49.6	202.8	228.1	267.0	530.0
Major and medium irrigation: Potential (lakh acres, gross)	5,15††	5,62††	1,21	1,28	1,43	2,95
Utilisation (lakh acres, gross)			86	94	1,06	2,28
Index number of industrial production (1950-51=100)	100	139	195	206	222	329
—do— (1956=100)	..	..	133	142	153	..
<i>Production of:</i>						
Steel ingots (lakh tonnes)	15	17	34	43	54	93.5
Aluminium (virgin metal) (thousand tonnes)	4.0	7.4	18.5	19.7	42.8	81.3
Machine tools (graded) (value in Rs. crores)	0.3	0.8	7.2	8.5	11.5	30.0
Sulphuric acid (thousand tonnes)	1,01	1,67	3,60	4,35	4,83	15,24

†The Central and State Governments incur some additional outlay each year on maintenance of completed Second Plan schemes.

*Provisional. **1949-50 production. ***Partially revised estimates.

†Final estimates. ††Net total of irrigated area.

TABLE 72 (concl'd.)

	Achievements					Targets 1965-66
	1950-51	1955-56	1960-61	1961-62	1962-63	
Petroleum products, refined (lakh tonnes)	4	37	61	62	69	1,00.6
<i>Cotton Cloth:</i>						
Mill sector (lakh metres) ..	340.10	466.50	464.90	468.60	449.80	527.80
Decentralised sector (lakh metres)	81.40	159.50	208.90	242.90	243.00	318.50
Total (lakh metres) ..	421.50	626.00	673.80	711.50	692.80	846.30
<i>Minerals :</i>						
Iron ore (lakh tonnes) ..	30	43	1.09	1.28	1.33	3.05
Coal (lakh tonnes) ..	3.28	3.90	5.55	5.52	6.38	9.86
Power : installed capacity (lakh kw)	23*	34*	55.8	60.3	67.2	1.27
Railways : freight carried (lakh tonnes)	9.30	11.58	15.65	16.00	17.90	24.89
Road transport: commercial vehicles on road (thousand)	1.16	1.66	2.10	..	2.70	3.65
Shipping tonnage (lakh grt) ..	3.9	4.8	8.6	9.1	10.6	10.9
General education : students in schools (lakh)	2.35	3.13	4.47	4.99	5.44	6.44
Technical education : engineering and technology—degree-level annual admission (thousand)	4.1	5.9	13.8	15.9	17.2	19.1
<i>Health :</i>						
Hospital beds (thousand) ..	1.13	1.25	1.86	1.93	2.02	2.40
Doctors (practising) (thousand)	56	65	70	74.5	77.8	81
Exports (Rs. crores)	624	609	631	668**	682†	850

*Figures relate to calendar years 1950 and 1955.

**Revised.

†Preliminary.

TABLE 73

THIRD PLAN OUTLAY AND PROGRESS OF EXPENDITURE, 1961-64

(Rs. crores)

Major head	Centre and States (combined)					States only		
	1961-66 Financial Provision	1961-62 (Actual)	1962-63 (Revised)	1963-64 (Budget)	1961-64		1961-66 Provi- sion	1961-64 Outlay
					Total	As % of col. 2		
1	2	3	4	5	6	7	8	9
Agriculture and Community Development ..	1,068	147	187	227	561	53	919	494
Major and Medium Irrigation including Flood Control	650	104	120	117	341	52	630	334
Power	1,012	139	183	247	569	56	880	517
Industry and Minerals ..	1,520	186	258	365	809	53	70	51
Village and Small Industries	264	38	44	44	126	48	137	57
Transport and Communications	1,486	302	361	389	1,052	71	226	139
Social Services and Miscellaneous	1,300	214	261	265	740	57	863	443
Inventories††	200	—	—	—	—	—	—	—
TOTAL	7,500	1,130	1,414	1,654	4,198	56	3,725	2,035

††Expenditure in respect of Inventories is distributed under various heads.

The outlay of Rs. 4,198 crores, during 1961-62 to 1963-64, accounts for 56 per cent of the total Plan provision. The first year's outlay accounted for 15 per cent, the second year's for 19 per cent and that of 1963-64 for an estimated 22 per cent.

Proportionately, the three years' outlay on transport was much higher than in other sectors, as a result of substantial increases made in the road programmes and additions in railway and post and telegraph programmes consequent on the national emergency. Outlays on agriculture, power and industry were also sharply stepped up from year to year. The States also increased the relative proportion of outlay on power. On the whole, except for transport and communications, which took about 25 per cent of the outlay in the first three years as against about 20 per cent provided in the Plan, the relative proportions of the outlay were maintained under most heads at the levels envisaged in the Third Plan.

Table 74 indicates the financing of the Plan in 1961-62 to 1963-64.

During 1961-62, normal resources including additional taxation, surpluses of public undertakings and borrowings, provided Rs. 700 crores of the Rs. 1,130 crores of Plan outlay; external assistance (Rs. 262 crores) and deficit financing (Rs. 168 crores) accounted for the remainder. Tax receipts were fairly buoyant. Additional tax effort at the Centre was substantial while the States made only a modest beginning. On the whole, financing of the Plan did not lead to any strain on the economy though the difficult resources position in certain States led to overdrafts with the Reserve Bank.

The normal resources position in 1962-63 was better than the revised estimates of Rs. 770 crores. For example, balance from current revenue was Rs. 90 crores as against (—) Rs. 42 crores shown in the revised estimates. Similarly, additional taxation yielded a higher amount. However, rupee resources that became available under external assistance (revised estimate of Rs. 437 crores) amounted to only Rs. 336 crores and deficit financing was also lower at Rs. 171 crores (as against Rs. 207 crores). Altogether, the actual outlay during the year would turn out to be somewhat lower than the revised estimate of Rs. 1,414 crores.

The provision for Plan outlay in 1963-64 at Rs. 1,654 crores was Rs. 240 crores more than the revised estimates for 1962-63. Also, the budgetary provision for defence, which was increased from Rs. 376 crores to Rs. 505 crores during 1962-63 consequent upon the declaration of the national emergency, was substantially higher at Rs. 867 crores for 1963-64. To finance the additional requirements of defence and development, the Centre undertook a large taxation programme. The States also made a significant tax effort. The yield at both Centre and the States is estimated at Rs. 330 crores for 1963-64 and Rs. 1,075 crores over the Plan period. Thus a little over half the increase in defence and Plan expenditure is sought to be covered by additional taxation.

The budget for the year involves a deficit of Rs. 241 crores, after taking into account receipts from existing taxes, market borrowings, small savings, etc., and external assistance. However, tax receipts under principal Central taxes in 1962-63 suggest a higher yield in 1963-64 which may reduce the deficit.

National Income and Employment

During the first two years of the Third Plan the annual rate of increase in national income is estimated at about 2.5 per cent as against over 5 per cent envisaged in the Plan. National income is vitally affected by the trend in agricultural production which still contributes the largest proportionate share to national output despite the substantial progress achieved in transport, power and industries sectors. The first two years of the Plan were marked by unfavourable seasonal conditions, with the result that the production levels of foodgrains and other crops did not correspond with

TABLE 74
FINANCING OF THE PLAN : CENTRE* AND STATES
1961-62 to 1963-64

	1961-62 Actuals			1962-63 Revised estimates			1963-64 Adjusted budget estimates			1961-62 to 1963-64 Total Centre and States
	Centre	States	Total	Centre	States	Total	Centre	States	Total	
1 Balance from current revenues	138	28	166	—94	52	—42	—433	30	—403	—279
2 Additional taxation	86	15	101	186	51	237	471	122	593	931
3 Railways contribution**	45	—	45	14	—	14	13	—	13	72
4 Surpluses of other public enterprises	13	21	34	8	20	28	46***	31	77***	139
5 Market loans†	62	85	147	97	104	201	113	87	200	548
6 Small savings††	25	65	90	43	59	102	67	68	135	327
7 Unfunded debt	40	14	54	45	14	59	47	18	65	178
8 Steel equalisation fund	13	—	13	7	—	7	6	—	6	26
9 Balance of miscellaneous capital receipts over non-Plan disbursements	40	10	50	167	—3	164	276	—56	220	434
10 Budgetary receipts corresponding to external assistance†	262	—	262	437	—	437	507	—	507	1,206
11 Deficit financing†	152	16	168	239	—32	207	233†††	8	241	616
12 Central assistance for State Plans	—322†	322†	—	—436††	436††	—	—450†††	450	—	—
13 TOTAL RESOURCES—	554	576	1,130	713	701	1,414	896	758	1,654	4,198
PLAN OUTLAY										

*Includes Union Territories.

**Excluding the amount raised by way of changes in fares and freights which is included under item 2.

***Excluding the amount raised by changes in postal rates, credit for which has been taken under item 2.

†As defined in the Plan, receipts under market loans refer to net absorption of Government securities by the public. Correspondingly deficit financing refers to changes in Government's indebtedness to the Reserve Bank. Receipts corresponding to external assistance include net receipts from foreign grants and loans as well as net accretion of rupee resources arising from PL 480 imports during the Third Plan period.

††Including Prize bonds, Gold bonds and receipts from Compulsory Deposit Scheme.

†††In the Central budget provision was made for Central assistance of Rs. 400 crores only. The figure adopted here is Rs. 450 crores as subsequently it was decided to increase the amount by Rs. 50 crores. Correspondingly the figure of deficit financing has been increased.

*Central assistance in respect of 1961-62 plan adds up to Rs. 344 crores. Of this, Rs. 322 crores was paid during that very financial year while the balance was paid in 1962-63.

††This is based on the data given in the State budgets and includes arrears in respect of 1961-62 paid in 1962-63.

the efforts being made to increase agricultural production. The first year's output was higher than that of the preceding year, the index having moved up from 139.7 in 1960-61 and to 141.4 in 1961-62. But in 1962-63, foodgrain, sugarcane, jute and oilseeds production received a set-back; the provisional index for total agricultural production was 136.8 in that year. Certain trends would, however, suggest that the amplitude of fluctuations in the downward direction of agricultural output caused by fluctuations in weather conditions has been somewhat reduced over the past few years.

Industrial production increased by 6.5 and 8 per cent respectively in the first two years, which was, however, lower than an increase of 11 per cent per annum anticipated in the Plan. The general index of industrial production advanced by 15.6 per cent between 1960 and 1962. But progress in the capital and basic intermediate goods industries was much higher. The output of basic metals increased by 25.8 per cent, fertilisers 25.9 per cent, heavy organic chemicals 38.7 per cent, heavy inorganic chemicals 53.5 per cent, industrial machinery 47 per cent, transport equipment 21 per cent, electrical machinery 18.2 per cent, and of electricity generation by 30.6 per cent. The additional output in consumer goods industries, which have a large weight in the total index, has been comparatively less, which accounts for the moderate rise in the aggregate index. Also, in the case of several industries, shortages in the supply of raw materials have tended to cause a slower increase in actual output as compared to the addition to production capacity.

Additional employment generated in the non-agricultural sector during the two years is estimated at 32 lakhs. The increase in employment has been accompanied by an increase in the number of people seeking employment. Registrations at the employment exchanges have gone up in the two years from 15.6 lakhs to 24.8 lakhs; a part of the increase is due to greater use of exchanges and their improved efficiency in securing placements. Unemployment among the educated classes also has shown an increase; at the same time shortages of manpower in professional and technical categories are being increasingly felt. The rural works programme is being implemented in 800 development blocks and is to be steadily expanded. A precise estimate of additional employment in the agricultural sector is not available.

CHAPTER XIV

COMMUNITY DEVELOPMENT

The Community Development Programme, which aims at the individual and collective welfare of India's vast rural population, was launched on October 2, 1952, in 55 selected projects, each project covering an area of about 500 sq. miles with about 300 villages and a population of about 2 lakhs. It is a programme of aided self-help to be planned and implemented by the villagers themselves, the Government offering only technical guidance and financial assistance. Its objectives are to develop self-reliance in the individual and initiative in the village community. Community thinking and collective action are encouraged through people's institutions like the panchayats, co-operative societies, vikas mandals, etc.

Agriculture, the mainstay of about 70 per cent of the rural population, receives the highest priority in the programme. Among other activities included are provision of better communications, improvement in health and sanitation, better housing, wider education, measures for women's and children's welfare, development of cottage and small-scale industries, etc.

The programme is implemented in units of blocks, each comprising generally 100 villages with an area of 150—200 sq. miles and a population ranging between sixty and seventy thousand. Before April 1958, the programme was being carried out in three different phases. Under the revised pattern, on completion of the first stage of intensive development for five years the block enters the second stage during which development is continued with a relatively reduced budget provision under the Community Development Programme for another five years but with increased provisions from the respective subject-matter departments. Before entering on the first stage, every block undergoes a "pre-extension phase" of one year during which the programme is exclusively confined to agricultural development.

On January 12, 1958, the National Development Council endorsed the recommendations on democratic decentralisation made by the Study Team on Community Development set up by the Committee on Plan Projects, and laid down certain broad principles that should guide the establishment of Panchayati Raj. These principles have been followed by the States in evolving patterns suitable to local conditions. Panchayati Raj is under implementation in Andhra Pradesh, Assam, Bihar, Gujarat, Madras, Maharashtra, Mysore, Orissa, Punjab, Rajasthan and Uttar Pradesh. The other States have either enacted or are in the process of enacting legislation for the purpose.

The panchayat, the co-operative and the school are the basic institutions at the village level for carrying out the programme. The elected panchayat has charge of all development programmes in the area. The co-operative functions in the economic sphere and the village school is being developed as the community centre to undertake work in educational, cultural, recreational and other allied fields. Associate organisations, such as women and youth organisations, farmers, and artisans' associations, etc., functioning in their respective spheres, are linked up with the panchayat in its development activities and are supported in turn by the panchayat in their own work.

Till the end of January 1964, 4,877 stage I, stage II and post stage II blocks were set up, covering about 5.66 lakh villages and a population of 40.33 crores. There were also 318 pre-extension blocks functioning in the country. The whole country has been delimited into 5,223 blocks, of which 5,195 blocks have been taken up under the programme. The remaining 28

blocks were kept for marginal adjustment. The State-wise coverage of the programme till January 31, 1964, is indicated below.

TABLE 75
COVERAGE OF COMMUNITY DEVELOPMENT PROGRAMME

States/Union Territories	No. of blocks delimited	No. of stage I & stage II blocks allotted	Population covered* (in lakhs)	Villages covered* (in hundreds)	Area covered* (in hundred sq. km.)	No. of pre-extension blocks
Andhra Pradesh	445	455	3.34	27.1	2,75.3	—
Assam	160	125	1.18	25.8	1,22.0	35
Bihar	575	488	4.52	67.7	1,74.0	87
Gujarat	224	212	1.84	18.6	1,77.0	—
Jammu & Kashmir	52	68	32	6.6	2,22.8	—
Kerala	142	127	1.62	1.6	38.9	15
Madhya Pradesh	416	415	3.09	70.4	4,43.5	1
Madras	375	374	3.03	14.1	1,30.5	1
Maharashtra ..	425	425	3.28	35.8	3,07.5	—
Mysore	268	267	2.16	26.4	1,92.2	—
Nagaland	15	15	4	40	165	—
Orissa	307	272	1.74	46.5	1,55.8	35
Punjab	228	222	1.92	21.3	1,22.0	6
Rajasthan	232	209	1.89	32.2	3,42.3	23
Uttar Pradesh ..	899	897½	6.90	1,12.6	2,94.3	—
West Bengal ..	341	234	3.02	37.9	86.1	101
Union Territories	118½	97½	44	17.7	1,44.8	14
TOTAL ..	5,222½†	4,877	40.33	5,66.3	32,45.4	318

FINANCE

Resources

Resources for the programme are drawn both from the people and the Government. For each block area, development schemes are conditioned by a qualifying scale of voluntary contribution from people in cash or kind or labour. When State assistance is offered for execution of such projects, expenses are shared by the Central and State Governments equally in respect of recurring items and in the proportion of 3 : 1 in the case of non-recurring items. For productive works like irrigation, reclamation of land, etc., necessary funds are advanced by the Central Government to State Governments in the shape of loans. The Central Government also bear half of the expenditure on personnel employed by the States in blocks.

People's Contribution

People's contribution till March 31, 1963 amounted to Rs. 129.72 crores forming about 38 per cent of the total Government expenditure which was Rs. 343.63 crores.

Expenditure Under the Plans

Expenditure incurred during the First and Second Plan periods amounted to Rs. 235.57 crores. The anticipated expenditure for the Third Plan period is Rs. 321.9 crores, of which Rs. 287.7 crores are earmarked for the Community Development Programme, Rs. 28.2 crores for the Panchayats and Rs. 6.0 crores for Central schemes.

*Estimated on the basis of 1961 census.

†Excludes 11 blocks for Goa, Daman and Diu, one block for Dadra and Nagar Haveli, ½ block for Yanam and 53½ additional C.D. blocks formed due to the redelimitation of Tribal Development Blocks.

The sub-heads under which this expenditure was incurred are indicated below.

TABLE 76
EXPENDITURE UNDER THE PLANS

(in lakhs of rupees)

Expenditure Head	During First Plan	During Second Plan	During 1961-62	During 1962-63	Total
Block headquarters (including transport, office building, equipment, etc.)	10,51	54,76	13,79	15,82	94,88
Agriculture and animal husbandry	3,55	11,00	4,36	5,27	24,18
Irrigation and reclamation	10,83	48,59	12,05	11,39	82,86
Health and rural sanitation	3,79	16,87	5,49	4,66	30,80
Education	3,44	12,06	2,76	3,08	21,34
Social education	2,00	10,19	2,92	3,00	18,11
Communication	5,16	12,61	4,02	4,78	26,57
Village industries	2,18	7,11	2,96	2,80	14,95
Housing	1,73	10,90	2,93	3,04	18,60
Unclassified (including imported equipment, suspense charge, etc.)	2,79	3,13	80	89	7,61
TOTAL	45,98	187,12	52,08	54,73	339,91
Central Schemes	20	2,27	45	80	3,72
GRAND TOTAL	46,18	189,39	52,53	55,53	343,63

ORGANISATION

At the Centre

The Ministry of Community Development and Co-operation is in overall charge of the programme. Matters of basic policy go before the Central Committee consisting of members of the Planning Commission and the Ministers for Food and Agriculture and Community Development and Co-operation with the Prime Minister as Chairman. Co-ordination with the allied Ministries is secured through special committees.

In the States

The execution of the programme is the responsibility of the State Governments which act through the State Development Committees consisting of the Chief Minister (Chairman), the Ministers of development departments and the Development Commissioner as Secretary. The executive head of the programme is the Development Commissioner who co-ordinates activities of all development departments.

In the Districts

The statutory Zila Parishads are responsible for the implementation of the programme in the districts. The Parishads consist of elected representatives of the people, including the Presidents of the Block Panchayat Samitis and MPs and MLAs of the district.

In the Blocks

At the block level, the Block Panchayat Samiti is in charge of the programme. The membership of the Samiti includes elected Sarpanches (Presidents of the village panchayats) and a few co-opted persons representing women and depressed and scheduled classes. The administrative personnel consisting of a Block Development Officer and eight Extension Officers, who are experts in agriculture, co-operation, animal husbandry, etc., work under

the direction of the Samiti. Voluntary associate organisations like the youth club, farmers' forum, mahila mandal, etc., supplement the work of the panchayat in their respective functional spheres. At the village level, while the panchayat is in overall control of the programme helped by associate organisations, the Gram Sevak acts as a multipurpose extension agent having ten villages in his charge.

Extension Organisation

The role of the Extension Organisation at the block and village levels is twofold. It carries proved knowledge or research of practical utility to the villages. It transmits the problems of the villagers back to research organisations for special study and solution. It is also charged with the task of promoting useful corporate life through co-operatives, better farming societies, mahila mandals and so forth.

Block Development Committees

The Block Development Committees, composed of representatives of the panchayats, co-operative societies, a few progressive farmers, social workers, women, MPs and MLAs representing the area, function in States where decentralisation has not yet been brought about. By convention the committees enjoy and exercise necessary powers and are responsible for planning, initiation, sanction and execution of the development schemes in the areas concerned.

TRAINING

The National Council for Study and Research in Community Development supervises the entire training programme implemented through a network of training centres.

The National Institute of Community Development, which is the apex institution, functions through the Study and Research Wings at Mussoorie and the Instruction Wing at Rajpur, Dehra Dun. The Study Wing offers orientation courses to key personnel—administrative, technical and non-official. The Research Wing undertakes investigation of current problems through its own staff and through universities, orientation and study centres and social education organisers' training centres. The Instruction Wing conducts courses for instructors as also for District Panchayat Officers and SDOs. Up to December 1963, 161 Instructors, 247 District Panchayat Officers and 68 SDOs had received training in the Instruction Wing; 1,183 officials and non-officials participated in the courses organised by the Study Wing.

There are 10 Orientation and Study Centres, mainly for the training of Block Development Officers and Block Extension Officers and another 13 centres for the training of Social Education Organisers and Mukhya Sevikas. At these centres, run directly by the Government of India or through State Governments or non-official organisations, non-officials like MLAs, Pradhans, etc., are also associated. Till the end of 1963, 5,745 Block Development Officers, 6,213 Social Education Organisers (men and women) and 3,730 Extension Officers were trained at these centres.

Besides, 33 BDOs, 27 EOs (Agriculture) and 20 SEOs (men and women) received training in tribal life and culture. 1,135 Principals and 1,276 Teacher Educators from training institutions for primary school teachers also received orientation training at the Social Education Organisers' Training Centres.

There are 98 Gram Sevaks' Training Centres at which 61,601 Gram Sevaks were trained till the end of September 1963. During the same period 5,771 Gram Sevikas received training at 47 Home Science Wings.

Till the end of 1963, 4,149 Extension Officers (Co-operation) were trained at 13 centres. Four centres run by the Small Industries Service

Institute and five centres run by the Khadi Board Mahavidyalayas provided training facilities to 3,159 Extension Officers (Industries).

Health personnel were provided training in three main training centres conducted by the Government of India. In addition, there are 142 institutions for the training of auxiliary nurse-midwives. Till the end of 1963, 3,291 health personnel were provided training at the three centres.

An increasingly large number of short-duration camps are being held in rural areas to train non-officials in supplementing the work of Gram Sevaks. About 57 lakh Gram Sahayaks (functional village leaders) were trained by the end of September 1963.

With the implementation of the programme of democratic decentralisation, the State Governments have launched an ambitious programme of training the members of Panchayati Raj institutions. Eighty of the 150 Panchayati Raj Training Centres envisaged under the Third Plan have started functioning.

The Central Institute of Panchayati Raj at New Delhi had imparted training to 200 instructors from Panchayati Raj Training Centres by the end of February 1964.

ACHIEVEMENTS

The more important of the physical achievements under the programme are indicated in Table 77.

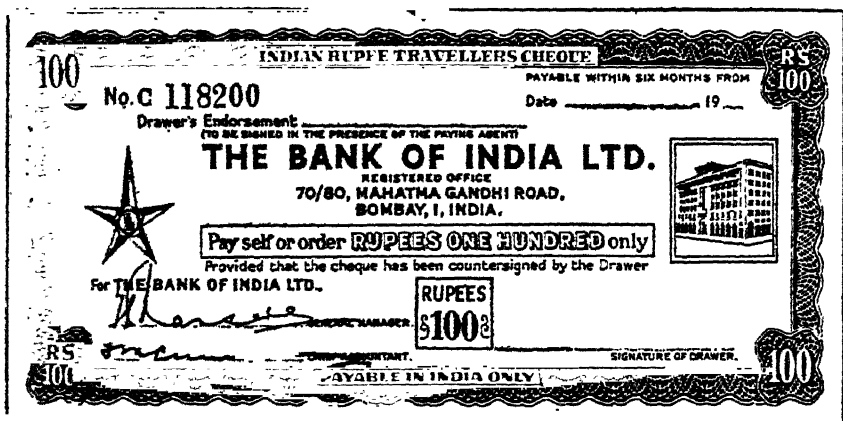
TABLE 77
ACHIEVEMENTS OF COMMUNITY DEVELOPMENT PROGRAMME

	During the Achievement year ending September		Average achievement per block during the year ending September	
	1961-62	1962-63	1961-62	1962-63
(1)	(2)	(3)*	(4)	(5)
I. Agriculture				
Improved seeds distributed (Mds.)	90,25,000	92,17,000	2,636	2,380
Chemical fertilisers distributed (Mds.)	2,24,30,000	3,70,27,000	6,553	9,560
Chemical pesticides distributed (Mds.)	3,57,231	4,44,763	147	159
Improved implements distributed (Nos.)	6,15,997	6,17,799	180	160
Agricultural demonstrations held (Nos.)	11,57,000	9,89,000	338	255
Compost pits dug (Nos.)	59,60,000	73,10,100	1,741	1,887
II. Animal Husbandry				
Improved animals supplied (Nos.)	28,625	27,328	8.4	7.8
Improved birds supplied (Nos.)	4,68,514	6,23,013	137	161
Animals castrated (Nos.)	26,99,000	29,34,200	788	758
Animals artificially inseminated (Nos.)	6,33,500	6,84,520	185	177
III. Village and Small Industries				
Ambar charkhas introduced (Nos.)	11,830	8,660	4.9	2.8
Brick kilns started (Nos.)	17,862	18,122	7.4	6.7
Bricks manufactured (Lakh) (Nos.)	1,58,37	1,50,63	6.8	6.1
Tiles manufactured (Lakh) (Nos.)	49,30	45,03	2.1	1.8
Sewing machines distributed (Nos.)	8,975	9,293	3.3	2.4

TABLE 77 (concl'd.)

(1)	(2)	(3)	(4)	(5)
Tannery pits started (Nos.)	4,335	3,479	1.8	1.3
Improved ghanis introduced (Nos.)	1,195	1,199	0.5	0.4
Bee-hives introduced (Nos.)	17,099	20,471	7.0	7.6
Value of improved tools and appliances distributed :				
(a) Blacksmithy (Rs. '000)	5.11	4.47	210	165
(b) Carpentry (Rs. '000)	5.13	4.64	211	172
IV. Social Education				
Adult literacy centres started (Nos.)	62,448	46,703	19	13
Adults made literate (Nos.)	8,85,002	7,72,254	262	199
Reading rooms & libraries started (Nos.)	16,221	15,391	5.2	4.0
Youth clubs and farmers' unions started:				
(i) Number	41,231	42,007	12	11
(ii) No. of members	7,07,104	8,35,333	225	216
Functional gram suhayaks' camps held:				
(i) Number	18,714	15,670	6.6	5.0
(ii) Functional leaders trained (No.)	7,84,717	7,42,458	250	192
V. Women's Programme				
Mahila samitis mandals started (Nos.)	20,123	22,682	5.9	5.9
Membership therein (Nos.)	3,60,797	4,56,344	105	118
Balwadis nurseries started (Nos.)	10,666	7,966	3.5	2.3
Children attending therein (Nos.)	2,59,266	2,09,271	85	61
Women's camps held (Nos.)	2,824	5,167	1.2	1.8
Women participated therein (Nos.)	1,07,037	1,66,805	44	44
VI. Health and Rural Sanitation				
Rural latrines constructed (Nos.)	1,17,000	1,11,590	34	29
Pucca drains constructed (Yds.)	23,46,000	14,90,500	685	423
Village lanes paved (Sq. yds.)	17,74,000	12,53,000	628	413
Drinking water wells constructed (Nos.)	40,144	39,703	12	10
Drinking water wells renovated (Nos.)	48,790	46,106	14	12
VII. Communication				
New kacha roads constructed (miles)	22,162	20,454	6.5	5.3
Existing kacha roads improved (miles)	33,604	33,936	10.5	8.8
Culverts constructed (Nos.)	26,397	22,823	7.7	6.0

*Excludes achievements for the quarter ending September 1963, for Punjab, Jammu and Kashmir and Manipur.



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CHAPTER XV

FINANCE

PUBLIC FINANCE

The power to raise and disburse public funds has been divided under the Constitution between the Centre and the States. There are thus more than one budget and more than one public treasury in the country. The sources of revenue for the Centre and the States are, by and large, mutually exclusive.

The Constitution provides that (i) no tax can be levied or collected except by the authority of law, (ii) no expenditure can be incurred from public funds except in the manner provided in the Constitution, and (iii) the executive authorities must spend public money only in the manner sanctioned by Parliament.

All receipts and disbursements of the Union Government are kept in two separate parts, namely, the Consolidated Fund and the Public Account. All revenues received, loans raised and money received by the Union Government in repayment of loans go together to form the Consolidated Fund of India. No money can be withdrawn from this Fund except under the authority of an Act of Parliament. All other receipts and disbursements, such as deposits, service funds, remittances, etc., go into the Public Account which is not subject to the vote of Parliament. To meet unforeseen needs, not provided in the Annual Appropriation Act, a Contingency Fund of India has also been established under Article 267(i) of the Constitution.

The Constitution also provides for the establishment of a Consolidated Fund and a Public Account for each State. Similarly the States have Contingency Funds to meet unforeseen needs pending legislative authorisation.

The railways, the largest nationalised industry, have their own funds and accounts and their budget is presented separately to Parliament. The appropriations and disbursements under the railway budget are subject to the same form of parliamentary and audit control as the other appropriations and disbursements.

Allocation of Revenue

The main sources of Central revenue are customs duties, excise duties levied by the Union Government, the corporation and income taxes (excluding taxes on agricultural income) and the profits transferred from the Reserve Bank. The revenue from the wealth tax and expenditure tax also accrues to the Centre. Besides, the railways and posts and telegraphs contribute to the general revenue of the Centre out of their net profits.

The main heads of revenue in the States are the taxes and duties levied by the State Governments; the share of taxes levied by the Central Government; and grants received from the Centre. Land revenue, sales tax, State excise duties, registration and stamp duties and shares of income tax and Central excise duties constitute more than four-fifths of the tax revenue and more than half of the total revenue receipts of the States. Property taxes and octroi and terminal taxes are the mainstay of local finance.

Transfer of Resources from Centre to States

The devolution of resources from the Centre to the States is a salient feature of the system of federal finance in India. Apart from their share of taxes and duties the State Governments receive statutory and other grants as well as loans for various development schemes and rehabilitation

purposes. The total amount of resources transferred to the States during the Second Plan period was more than double of that during the First Plan period as shown in the following table.

TABLE 78
RESOURCES TRANSFERRED TO STATES

(in crores of rupees)

	Taxes and duties	Grants from			Loans	Total
		Revenue account	Capital account	Central Road Fund		
First Plan period	326.7	243.0	23.8	15.9	798.5	1,412.9
Second Plan period	711.1	667.9	59.1	19.0	1,410.8	2,867.9
Third Plan period :						
1961-62 (Actuals)	178.4	199.0	15.9	1.7	452.4	847.4
1962-63 (Actuals)	224.1	200.4	19.0	2.8	523.5	969.8
1963-64 (Revised)	259.5	230.6	22.5	4.1	626.1	1,142.8
1964-65 (Budget)	253.7	281.4	28.2	4.5	605.8	1,173.6

The following table gives the breakup of payments to States on account of taxes and duties.

TABLE 79
TAX REVENUE TRANSFERRED TO STATES

(in crores of rupees)

	Income-tax	Union excise duties	Additional duties of excise in lieu of sales taxes	Taxes on railway passenger fares	Estate duty	Total
First Plan period	278.2	46.1	—	—	2.4	326.7
Second Plan period	374.7	152.9	128.3	42.6	12.7	711.1
Third Plan period :						
1961-62 (Actuals)	93.9	41.1	39.5	—	3.9	178.4
1962-63 (Actuals)	95.3	79.0	45.9	—	3.9	224.1
1963-64 (Revised)	119.3	92.4	43.6	—	4.2	259.5
1964-65 (Budget)	108.4	93.9	47.1	—	4.3	253.7

Finance Commission

The Third Finance Commission constituted on December 2, 1960 submitted its report on December 14, 1961. The States' share of taxes, duties and Central grants based on its recommendations is indicated in Table 80. The Fourth Finance Commission, with Dr. P. V. Rajamannar as Chairman, was constituted on May 5, 1964.

Annual Financial Statement or Budget

An estimate of all anticipated revenue and expenditure of the Union Government for the coming financial year is laid before Parliament towards the end of February every year. This is known as the "Annual Financial Statement" or the "Budget". Apart from giving estimates of revenue and expenditure, this statement also contains (i) a review of the financial position of the preceding year, and (ii) proposals for financing capital expenditure.

The presentation of the Annual Financial Statement is followed by a general discussion in both Houses of Parliament. The estimates of expenditure, other than that charged, are then placed before the House of the People in the form of "Demands for Grants". Ordinarily, a separate Demand is made for each Ministry. All withdrawal of money from the Consolidated Fund is thus authorised by an Appropriation Act passed by

TABLE 80
STATES' SHARE OF TAXES, DUTIES AND CENTRAL GRANTS

State	Estate duty	Grant in lieu of tax on railway passenger fares	Income tax	Union excise duties on 35 scheduled articles	Additional duties of excise in replacement of sales tax on 6 articles		Grants-in-aid under substantive portion of Article 275(1)	Additional for improvement of communications
	percentage	(crore rupees)	percentage	percentage	Amounts representing income of States in 1956-57 (lakh rupees)	Percentage for remaining sum	to revenue of States (lakh rupees)	(lakh rupees)
Andhra Pradesh	8.34	1.11	7.71	8.23	2,35.24	7.75	12.00	50
Assam	2.75	0.34	2.44	4.73	85.08	2.50	9.00	75
Bihar	10.78	1.17	9.33	11.56	1,30.16	10.00	8.00	75
Gujarat	4.78	0.68	4.78	6.45	3,23.45	5.40	9.50	1,00
Jammu & Kashmir	0.83	—	0.70	2.02	—	—	3.25	50
Kerala	3.92	0.23	3.55	5.46	95.08	4.25	8.50	75
Madhya Pradesh	7.51	1.04	6.41	8.46	1,55.17	7.00	2.65	1,75
Madras	7.80	0.81	8.13	6.08	2,85.34	9.00	8.00	—
Maharashtra	9.16	1.35	13.41	5.73	6,37.77	10.60	—	—
Mysore	5.46	0.56	5.13	5.82	1,00.10	5.25	7.75	50
Orissa	4.08	0.22	3.44	7.07	85.10	4.50	16.00	1,75
Punjab	4.71	1.01	4.49	6.71	1,75.19	5.25	2.75	75
Rajasthan	4.67	0.85	3.97	5.93	90.10	4.00	8.75	—
Uttar Pradesh	17.10	2.34	14.42	10.68	575.81	15.50	2.00	—
West Bengal	8.11	0.79	12.09	5.07	2,80.41	9.00	8.50	—
..	100.00	12.50	100.00	100.00	3,254.00	100.00	1,10.25	9,00
.. TOTAL	..	..	..	..	..	..	..	..

Parliament every year. The tax proposals of the Budget are embodied in another Bill which is passed as the "Finance Act" of the year. Estimates of receipts and expenditure are similarly presented by State Governments to their legislatures before the beginning of the financial year and legislative sanction for financial expenditure is secured through similar procedure.

Audit

The Constitution requires that the audit authorities, who are independent of the executive, should scrutinise the expenditure of the Central and State Governments and ensure that this is strictly within the limits of their competence. It further enjoins that an account of the expenditure of each Government should be approved by its legislature.

BUDGET ESTIMATES 1964-65

The budget estimates for 1964-65 as presented in the Lok Sabha on February 29, 1964 placed expenditure at Rs. 2,041.31 crores as compared to Rs. 1,825.34 crores (revised) in 1963-64 and revenue (at existing level of taxation) at Rs. 2,095.12 crores as compared to Rs. 1,913.68 crores (revised) in the previous year, resulting in a surplus of Rs. 53.81 crores.

Tables 81 and 82 show the budget of the Central Government for 1964-65 on revenue and capital accounts respectively.

TABLE 81
REVENUE AND EXPENDITURE OF THE GOVERNMENT OF INDIA
(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	1962-63 Accounts	1963-64 Budget	1963-64 Revised	1964-65 Budget
Revenue				
Customs	245,96	301,20	320,00	{ 330,00 + 6,37*
Union excise duties	598,83	687,51	703,47	{ 750,39 19,15*†
Corporation tax	221,50	222,00	275,00	{ 295,00 †11,00*
Taxes on income	185,96	218,00	235,00	{ 250,00 14,00
Estate duty	3,94	4,00	4,35	{ 4,40 + 3,00*
Taxes on wealth	9,54	9,40	10,00	{ 10,00 + 20*
Expenditure tax	20	10	17	{ 5 + 1,50*
Gift tax	97	95	1,10	{ 1,10 + 2,00*
Other heads	18,14	19,87	20,46	{ 21,57 252,14
Debt services	153,23	217,05	220,46	{ 8,98 28,13
Administrative services	6,92	6,76	8,25	{ 15 11
Social and developmental services	46,91	31,61	29,25	{ 3,75 6,81
Multi-purpose river schemes, etc.	56	45	15	{ 53,73 17,29
Public works, etc.	3,75	4,38	3,77	{ 31,08 143,31
Transport and communications	7,13	7,46	7,20	{ 108,45 - 4,27
Currency and mint	54,23	73,68	57,37	{ - 2,95*
Miscellaneous	27,88	24,93	17,48	
Contributions and miscellaneous adjustments	24,88	27,66	29,11	
Extraordinary items	73,91	81,00	94,60	
Deduct—Share of income tax payable to States	—95,27	—97,95	—119,29	
Deduct—Share of estate duty payable to States	—3,88	—3,88	—4,22	
TOTAL	1,585,29	1,836,18	1,913,68	2,095,12
Deficit on Revenue Account	—	16,22	—	+ 40,27*†

*Effect of Budget proposals.

†Excludes Rs. 39 lakhs, being the share of Union excise duties payable to States which has been taken in reduction of revenue.

TABLE 81 (concl'd.)

	1962-63 Accounts	1963-64 Budget	1963-64 Revised	1964-65 Budget
Expenditure				
Collection of taxes and duties	23,47	23,83	23,67	25,34
Debt services	245,43	280,24	282,06	318,41
Administrative services	75,17	88,28	80,45	81,84
Social and developmental services	159,20	155,40	146,94	168,14
Multi-purpose river schemes, etc.	1,36	1,96	1,36	1,84
Public works, etc.	18,50	20,94	21,65	20,21
Transport and communications	9,31	9,79	8,70	10,18
Currency and mint	22,03	17,24	16,76	17,33
Miscellaneous	104,45	110,98	91,99	98,51
Contributions and miscellaneous adjustments	323,36	349,04	375,15	434,19
Extraordinary items	64,31	86,19	84,06	147,52
Defence services (net)	425,30	708,51	692,55	717,80
TOTAL	1,471,89	1,852,40	1,825,34	2,041,31
Surplus on revenue account	113,40	—	88,34	94,08

TABLE 82
CAPITAL BUDGET OF THE GOVERNMENT OF INDIA

(in lakhs of rupees)

	1962-63 Accounts	1963-64 Budget	1963-64 Revised	1964-65 Budget
Receipts				
New loans in India	328,94	393,00	441,70	295,00
Gold bonds	3,39	1,00	5,22	—
Prize bonds, premium prize bonds	4,23	6,00	5,00	5,00
15-year annuity certificates	48	50	40	45
Foreign loans	339,57	462,43	502,56	696,97
Special floating loan	3,45	3,45	3,45	3,45
Net receipts from :				
Treasury bills	124,57	181,00	60,00	176,00
National defence fund	41,40	19,75	—5,97	14
Investment of US Government counterpart deposit funds	48,07	90,00	65,42	—84,84
Defence deposit certificates	9,77	23,00	22,00	22,48
Treasury savings deposit certificates	23	—7,58	—5,40	—5,15
Post office savings bank deposits	4,66	33,00	33,00	33,50
Compulsory deposits	—	25,00	15,00	10,00
Cumulative time deposits	5,36	9,00	9,00	12,00
12-year national defence certificates	53,59	85,00	100,40	102,00
National savings and other certificates	—19,29	—15,82	—18,90	—16,43
12-year national Plan savings certificates	19,59	—21,80	—25,20	—23,50
Other unfunded debt	41,84	46,92	50,33	55,65
Railway pension, depreciation, revenue reserve, and development funds	15,28	22,04	23,62	31,97
Telephone development fund	1,35	80	1,37	15
P. & T. renewals, reserve and other funds	10,63	13,24	17,04	11,00
Emergency risks (goods) and (factories) insurance funds	9,00	32,94	16,54	2,78
Sale proceeds of American and lease-lend surpluses	—	—	—	4,33
Appropriation for reduction or avoidance of debt	5,00	5,00	5,00	5,00

TABLE 82 (concl'd.)

	1962-63 Accounts	1963-64 Budget	1963-64 Revised	1964-65 Budget
Deposits under Income Tax Act (net)	—3.93	—19	—36	—4
Discount sinking fund (net)	60	1.89	87	1.72
Payment by Reserve Bank for rupee coin	4.78	5.00	5.00	5.00
Repayment of advances by State Governments	144.75	194.87	185.73	238.92
Repayment of other loans and advances	26.12	53.62	42.56	46.03
Other deposits and advances (net)	160.63	172.91	188.74	378.10
TOTAL	1,384.06	1,835.97	1,744.12	2,007.68
Deficit on capital account	94.97	—	105.95	53.67
Disbursements				
Capital Outlay :				
Agricultural improvement and research	3.89	2.95	1.99	2.82
Industrial development	171.35	224.00	208.52	217.22
Broadcasting	1.27	1.75	1.50	1.45
Multi-purpose river schemes, irrigation and electricity schemes	3.56	11.43	7.72	10.72
Public works	41.64	68.11	70.44	66.06
Delhi capital outlay	6.84	7.38	11.98	13.73
Dandakaranya development scheme	4.21	3.46	4.38	4.25
Other works	3.74	5.93	3.49	3.46
Ports	2.04	5.96	4.45	2.48
Lighthouses and lightships	—1	20	—	—
Aviation	2.93	3.66	3.66	4.95
Road and water transport schemes	42	1.29	3	—
Overseas communications service	39	40	40	29
Shipping, tankers, etc.	1.00	1.33	60	1.32
Currency and coinage	8.62	11.54	13.07	8.61
Mints	4	19	19	33
Kolar gold mines	18	3.35	3.30	56
Commuted value of pensions	24	14	39	40
Sterling pensions	—3.70	—3.74	—3.74	—6.34
Schemes of government trading	—22.19	49.69	30.07	31.03
Grants for development	15.39	18.55	17.80	21.38
Compensation to displaced persons	—4.28	—4.35	—8.08	—5.16
Transfer of development assistance from the Govt. of U.S.A.	82.44	61.55	67.83	174.78
Payments under Indus Waters Treaty	6.89	6.63	6.63	6.08
Other civil heads	81	75	32	37
Defence	48.61	158.72	115.63	136.10
Railways	214.89	218.50	237.25	253.00
Posts and telegraphs	20.96	28.00	30.24	20.59
Discharge of permanent debt	228.89	231.57	239.94	259.61
Discharge of special floating debt	—	3.43	3.43	3.43
Inter-State settlement	—1.76	90	90	—
Advances to State Governments	511.09	529.14	607.42	595.18
Loans to Union Territory Governments	—	—	11.33	15.91
Other loans and advances	128.64	167.14	156.99	216.74
TOTAL	—	1,820.25	1,850.07	2,061.35
Surplus on capital account	—	15.72	—	—

Table 84 shows the budgetary position of the Government of India for different years. Table 85 shows the consolidated budgetary position of the States.

PUBLIC DEBT

The interest-bearing obligations of the Government of India which include public debt, unfunded debt, deposits bearing interest, foreign debts, etc., rose by Rs. 906 crores from Rs. 7,691 crores at the end of 1962-63 to Rs. 8,597 crores at the end of 1963-64 and were expected to rise further by Rs. 1,062 crores to Rs. 9,659 crores by the end of 1964-65. External obligations stood at Rs. 1,788 crores at the end of 1963-64 showing a rise of Rs. 430 crores over 1962-63.

As against these liabilities, interest-yielding assets of the Government of India (capital advanced to railways, posts and telegraphs, public sector industries, State Governments, etc.) amounted to Rs. 7,589 crores at the end of March 1964 representing an increase of Rs. 1,093 crores over 1962-63. During 1964-65 interest-yielding assets are estimated to show a further rise of Rs. 1,016 crores to Rs. 8,605 crores.

Table 83 shows the interest-bearing obligations and interest-yielding assets of the Central Government.

TABLE 83
INTEREST-BEARING OBLIGATIONS AND INTEREST-YIELDING
ASSETS OF THE GOVERNMENT OF INDIA

(in crores of rupees)

	At the end of		
	1938-39 (Pre-war year)	1963-64 (Revised)	1964-65 (Budget)
Interest-bearing Obligations			
In India:			
Public debt—			
Loans	437.87	3,114.46	3,222.19
Treasury bills	46.30	1,359.55	1,535.55
TOTAL—PUBLIC DEBT	484.17	4,474.01	4,757.74
Unfunded debt—			
Investment of US Government counterpart deposit funds	—	408.03	323.19
Service funds	1.03	0.26	0.24
10-year treasury savings deposit certificates	—	76.39	71.24
10-year defence deposit certificates	—	31.77	54.25
Post office savings bank deposits	81.88	505.22	538.72
Compulsory deposits	—	15.00	25.00
Cumulative time deposits	—	20.23	32.23
12-year national plan savings certificates	—	342.35	318.85
12-year national defence certificates	—	153.99	255.99
Post office cash and defence savings certi- ficates	59.57	0.64	0.47
National savings certificates	—	99.83	84.77
10-year national Plan certificates	—	15.91	14.71
State provident funds	72.40	420.59	474.88
Other items	10.25	22.43	23.81
TOTAL—UNFUNDED DEBT	225.13	2,112.64	2,218.35
Deposits			
Depreciation, development and reserve funds	27.34	200.50	243.67
Other deposits	—	21.37	20.69
TOTAL—DEPOSITS	27.34	221.87	264.36
TOTAL—OBLIGATIONS IN INDIA ..	736.64	6,808.52	7,240.45

TABLE 83 (Concl'd.)

	At the end of		
	1938-39 (Pre-war year)	1963-64 (Revised)	1964-65 (Budget)
Outside India :			
Public debt—			
Defence certificates	—	0·09	0·09
Loans from U.S.A.	—	779·20	1,048·64
U.S. Export-Import Bank loans	—	100·23	104·54
Loans from U.S.S.R.	—	167·75	236·00
U.K. Credits—			
(a) U.K. Government loans	—	220·72	236·31
(b) India stocks and railway debenture stocks	396·50	0·08	0·08
(c) Capital portion of railway annuities	47·82	—	—
Loans from Canada	—	12·16	13·90
Loans from Federal Republic of Germany	—	173·08	191·04
Loans from Japan	—	37·61	57·53
Loans from Switzerland	—	2·23	6·23
Loans from Czechoslovakia	—	1·00	5·00
Loans from Yugoslavia	—	1·05	5·20
Loans from Poland	—	3·20	8·70
Loans from Australia	—	0·45	4·11
Loans from Netherlands	—	0·50	3·50
Loans from France	—	—	1·28
Loans from Denmark	—	0·10	1·03
Loans from Belgium	—	—	0·80
Loans from Federation of Rhodesia and Nyasaland	—	1·66	0·79
Loans from New Zealand	—	0·33	0·26
Loans from Kuwait Government	—	25·72	22·51
Loans from I.B.R.D.	—	181·82	179·11
Loans from I.D.A.	—	72·48	98·56
Loans from Bank of India, Tokyo	—	0·05	0·04
New Credits	—	7·52	192·89
TOTAL—DEBT RAISED OUTSIDE INDIA	444·32	1,788·43	2,418·14
TOTAL—INTEREST-BEARING OBLIGATIONS	1,180·56	8,596·95	9,658·59
Interest-yielding Assets			
Capital advanced to railways	725·24	2,134·06	2,387·06
Capital advanced to other commercial depart- ments (including Damodar Valley Corpo- ration)	27·42	304·74	306·79
Investment in commercial concerns (indus- trial development)	—	853·74	1,012·44
Capital advanced to States	123·28	3,025·83	3,392·71
Capital advanced to Union Territory Govern- ments	—	11·33	27·24
Other interest-bearing loans	20·71	941·50	1,164·86
Amount recoverable from the U.K. and the States on account of purchase of annuities for sterling pensions	—	17·44	14·23
Debt due from Pakistan	—	300·00	300·00
TOTAL—INTEREST-YIELDING ASSETS	896·65	7,588·64	8,605·33
Cash and securities held on Treasury account	30·30	52·32	51·90
Balance of total interest-bearing obligations not covered by above assets	254·01	955·99	1,001·36

- NOTES : 1. The outstandings at the end of each year are shown in the statement. The accounts for the year 1947-48 (pre-partition) and 1962-63 have not yet been closed finally and the figures have, therefore, been worked out on the best information available.
2. Sterling obligations have been converted into rupees at 1 sh. 6d. to the rupee.
3. Final debt settlement with Pakistan has yet to be made. The figure entered for debt due from Pakistan is a rough indication of the amount likely to be due to India.

TABLE 84
BUDGETARY POSITION OF THE GOVERNMENT OF INDIA

(in crores of rupees)								
		1950-51 (Accounts)	1955-56 (Accounts)	1960-61 (Accounts)	1961-62 (Accounts)	1962-63		1963-64 (Budget)
						(Budget)	(Revised)	
I. Revenue account								
A. Revenue (a)	..	405.86	481.19	877.46	1,036.79	1,235.37	1,342.32	1,696.91(b)
B. Expenditure (c)	..	346.64	440.76	826.21	911.94	1,236.09	1,364.38	1,697.68
C. Surplus (+) or deficit (-)	..	+59.22	+40.25	+51.25	+124.85	-0.72	-22.06	-0.77
II. Capital account								
A. Receipts (d)	..	104.45	280.95	1,127.00(e)	957.34(e)	1,313.02	1,239.70(e)	1,618.62(b)
B. Disbursements	..	182.59	470.92	1,000.53	11,71.61	14,02.83	1,515.92	1,778.27
C. Surplus (+) or deficit (-)	..	-78.14	-189.97	+126.47	-214.27	-89.81	-276.22	-159.65
III. Miscellaneous (net) (f)	..	+15.26	-10.35	-60.87	-25.09	+0.95	+9.50	+9.37
IV. Overall surplus (+) or deficit (-)	..	-3.66	-159.87	+116.85	-114.51	-89.58	-288.78	-151.05
Financed by :								
A. Treasury bills (g)	..	-16.10	-123.38	+141.31	-118.69	-89.00	-290.00	-151.00
[increase (+)]	..							
B. Cash balances	..	+12.44	-36.49	-24.46	+4.18	-0.58	+1.22	-0.05
[decrease (-)]	..	149.50	32.23	69.67	45.22	49.92	49.50	50.62
(i) Opening balance	..	161.94	-4.26	45.21	49.40	49.34	50.62	50.57
(ii) Closing balance	..							

NOTE :—Accounts are provisional; budget estimates for 1963-64 relate to those presented to the Lok Sabha.

(a) Excluding States' share of excise duties and other taxes; (b) Including the effect of budget proposals; subsequent modifications in tax proposals have not been taken into account; (c) Excluding the payment of States' share of excise duties and additional excise duties; (d) Excluding Treasury bill receipts; (e) Excludes *ad hoc* Treasury bills of Rs. 50 crores each in 1960-61, 1961-62 and 1962-63 (revised) funded in January 1961, February 1962 and December 1962, respectively. (f) Remittances and transfers of cash between UK and India; (g) Mostly sold to the Reserve Bank.

TABLE 85
CONSOLIDATED BUDGETARY POSITION OF STATES

	(in crores of rupees)					
	1951-52	1955-56	1960-61	1961-62	1962-63	1963-64
I. Revenue account						
Revenue (a)	396.4	546.3	1,011.8	1,071.5	1,229.4	1,453.3
Expenditure (a)	392.6	624.8	987.4	1,121.3	1,204.3	(1,352.0)
Surplus (+) or deficit (—)	—1.3.8	—78.5	124.4	47.8	34.9	1,364.9
II. Capital account						
Receipts (b)	135.0	379.7	580.0	699.9	730.3	(12.0)
Disbursements	188.7	369.7	632.9	668.5	761.3	782.5
Surplus (+) or deficit (—)	—53.7	—110.0	—52.9	—131.4	—31.0	843.8
III. Miscellaneous (net) (c)	11.6	0.8	—19.9	21.0	—0.2	61.3
IV. Overall surplus (+) or deficit (—)	48.3	69.4	48.4	37.5	66.1	—0.1
V. Increase (+) or decrease (—) in cash balances	10.8	51.1	3.7 (e)	0.9	35.5	—72.0
(d)						(74.3)
(i) Opening balance	61.5	92.1	—4.6	—0.9	—32.8	—11.4
(ii) Closing balance	50.7	41.0	—0.9	—1.8	—68.3	—72.9
VI. Purchase (+) or sale (—) of securities	37.6	18.3	52.1	36.6	30.6	40.5

NOTE: The figures for 1951-52 do not include the then Part C States; (viz., Ajmer, Bhopal, Coorg, Delhi, Himachal Pradesh and Vindhya Pradesh) since they had capital budgets only from 1954-55. For 1955-56 revised estimates are used since later figures are not available. The figures of purchase and sale of securities up to 1956-57 relate to the then Parts A and B States. The figures from 1957-58 onwards relate to the reorganised States which exclude Delhi and Himachal Pradesh, which are now Union Territories, and include Kutch which is now a part of the Gujarat State; the figures from 1957-58 also include Jammu and Kashmir. The budget estimates for 1963-64 are before tax changes except in the case of Orissa, Kerala and Jammu and Kashmir. The position before tax changes in all States is also shown in brackets.

(a) Transfers from and to funds are excluded from revenue and expenditure, respectively. (b) Excluding net purchase or sale of securities. (c) Consists of remittances. (d) Including overdraft. (e) In arriving at this figure, the opening balance for 1960-61, given in the budget of Maharashtra (which represents the figures for the composite State of Bombay) has been adjusted to exclude the amount transferred to Gujarat.

Tables 86 and 87 show the position regarding the debts of the State Governments and the Government of India, respectively.

TABLE 86
DEBT POSITION OF STATES

	(in lakhs of rupees)				
	At the end of				
	1951-52	1955-56 (a)	1960-61	1961-62	1962-63 (a)
I. <i>Public Debt:</i>					
(i) Permanent debt ..	133,71	264,48	493,12	569,53	643,15
(ii) Floating debt ..	15,66	8,20	41,75	50,27	12,76
(iii) Loans from Central Government.	238,54	876,07	2,015,81	2,314,55	2,703,06
(iv) Other debt (c) ..	—	—	51,57	63,60	77,61
II. Unfunded debt ..	57,37	83,19	134,93	149,04	162,42
III. Gross total debt ..	445,28	1,231,94	2,737,17	3,146,99	3,599,00

Note : The figures in this statement are based on actual returns furnished by the States except in certain cases where they are based on the budget papers. The data for 1951-52 and 1955-56 exclude the then Part C States, which had a separate capital account only from 1954-55; figures from 1956-57 onward relate to reorganised States and include Jammu and Kashmir from 1957-58.

(a) Revised estimates.

(b) Excludes the amounts provisionally allocated to Kerala on the population ratio.

(c) Includes loans from National Agricultural Credit (Long-Term Operations) Fund, National Co-operative Development and Warehousing Board, Khadi and Village Industries Commission, Employees' State Insurance Corporation, Life Insurance Corporation, etc.

Incidence of Indirect Taxation

The first systematic study of the incidence of Central and State indirect taxes on rural and urban households in five monthly expenditure groups of Rs. 1-50, 51-100, 101-150, 151-300 and 301 and above, was undertaken for 1953-54 by the Taxation Enquiry Commission. Another study on similar lines made by the Department of Economic Affairs undertook a comparative analysis of the distribution of money burden of indirect taxes among rural and urban households in the five expenditure groups during 1953-54 and 1958-59. The findings are shown in the following table.

TABLE 88
INCIDENCE OF INDIRECT TAXATION

	Tax as per cent of consumer expenditure					
	1953-54			1958-59		
	All house-holds	Rural house-holds	Urban house-holds	All house-holds	Rural house-holds	Urban house-holds
<i>All Indirect Taxes</i>	3.6	2.9	5.9	5.7	4.4	9.3
<i>Central Taxes</i>	2.1	1.8	3.5	3.8	3.1	6.0
(i) Central excise duties ..	1.0	0.8	1.5	2.7	2.2	4.1
(ii) Import duties	1.1	1.0	2.0	1.0	0.8	1.2
(iii) Railway passenger fares tax	—	—	—	0.1	0.1	0.7
<i>State Taxes</i>	1.5	1.1	2.4	1.9	1.3	3.3
(i) State excise duties ..	0.4	0.5	0.4	0.4	0.4	0.4
(ii) Sales taxes (State and Central)	0.7	0.5	1.3	1.0	0.6	1.9
(iii) Sales tax on motor spirits and motor vehicles tax	0.2	0.1	0.4	0.3	0.2	0.6
(iv) Entertainment tax ..	0.1	—	0.2	0.1	—	0.3
(v) Sugarcane cess	0.1	—	0.1	0.1	0.1	0.1

TABLE 87
DEBT POSITION OF THE GOVERNMENT OF INDIA

End of March	Rupee loans (a)	Percent- age to total	Treasury bills	Percent- age to total	Small savings (b)	Percent- age to total	Other obliga- tions (c)	Percent- age to total	Total	Percent- age in- crease (+) or decrease (-)	(in crores of rupees)	
											Total	External Debt (Of which dollar loans
1951 ..	1,438.46	58.2	364.72 (d)	14.8	327.66	13.2	342.81	13.9	2,773.65	12.2	49.81	24.60
1956 ..	1,508.67	49.1	595.25	19.4	576.07	18.8	390.29	12.7	3,070.28	7.8	138.81	117.57
1961 ..	2,571.33 (e)(f)(g)	46.9	1,106.30	20.2	974.61	17.8	825.77 (f)	15.1	5,478.01	6.6	846.22	521.40
1962 ..	2,688.45 (e)(f)(g)(h)	45.9	1,174.98	20.1	1,060.56	18.1	931.38 (f)	15.9	5,855.37	6.9	1,110.55	650.95
1963 ..	2,840.94 (e)(f)(g)(h)(i)	45.1	1,299.55	20.6	1,127.76	17.9	1,035.81 (f)	16.4	6,304.06	7.7	1,379.03 (k)	869.46

NOTE : Figures are provisional excepting those of rupee loans and Treasury bills.

(a) Figures from 1957 include Hyderabad State Loans, the liability of which was taken over by the Central Government under Section 82(1) of the States Reorganisation Act, 1956; figures from 1961 include those of 5-year interest-free prize bonds issued from April, 1960 and the figure for 1963 includes those of premium prize bonds also, issued from January 1963. (b) Inclusive of Indian Union's share of pre-partition liabilities. (c) Including (1) unclaimed balances of old loans which have ceased to bear interest from the date of discharge, (2) balances of special loans, (3) balances of State provident funds and other accounts such as General Family Pension Fund, the Hindu Family Annuity Fund, the Postal Insurance and Life Annuity Fund, etc., and (4) unclaimed balances in respect of three-year interest-free defence bonds and five-year interest-free prize bonds; these were issued from June 1940 and January 1944 respectively and discontinued from May 1946 and January 1949, respectively. (d) Including Treasury deposit receipts. (e) Includes a special issue of the 4 per cent loan, 1973 for Rs. 300 crores created in July 1958, which was wholly taken up by the Reserve Bank of India against cancellation of *ad hoc* Treasury bills and held in the Issue Department as cover against note issue. (f) Includes further issues of Rs. 150 crores created in December 1959 against cancellation of *ad hoc* Treasury bills held by the Reserve Bank. (g) Includes further issues of Rs. 50 crores created in January 1961 against cancellation of *ad hoc* Treasury bills held by the Reserve Bank. (h) Includes further issue of Rs. 50 crores created in February 1962 against cancellation of *ad hoc* Treasury bills held by the Reserve Bank of India. (i) Includes further issues of Rs. 50 crores created in December 1962 against cancellation of *ad hoc* Treasury bills held by the Reserve Bank of India. (j) Includes Investment of Rs. 240 crores, Rs. 300 crores and Rs. 355 crores of U.S. Government counterpart deposit funds in 'special securities' during 1961, 1962 and 1963 respectively. (k) Includes outstanding of the 'Defence Certificates' which are being issued in other countries.

The study brings out that the increase in indirect taxation during the period 1953-54 to 1958-59 was accompanied by a more progressive distribution of its money burden among the five expenditure groups of rural and urban households.

MONEY SUPPLY AND CURRENCY

Money Supply

During 1963, money supply with the public registered a sizeable expansion of Rs. 418.6 crores as compared to Rs. 280.2 crores in 1962 and Rs. 164.0 crores* in 1961. The rate of expansion in 1963 was higher at 13.4 per cent as compared to 9.9 per cent in 1962 and 6.0 per cent* in 1961. Component-wise, both currency with the public** and deposit money recorded larger expansion of Rs. 229.1 crores and Rs. 189.5 crores, respectively, than in 1962 when currency with the public had risen by Rs. 186.7 crores and deposit money by Rs. 93.5 crores.

As in the preceding year, the expansion in money supply with the public during 1963 resulted mainly from a sharp rise in bank credit to Government which increased by Rs. 305.6 crores as compared to Rs. 291.5 crores in 1962. Net bank credit to the private sector,† which had shown a rise of only Rs. 64.2 crores in 1962, increased by as much as Rs. 131.4 crores in 1963. Net foreign exchange assets of the Reserve Bank also exerted an expansionist influence to the tune of Rs. 18.2 crores as against a contractionist impact of Rs. 67.4 crores witnessed in the preceding year. The expansionist impact of all these factors was partly neutralised by an increase in net non-monetary liabilities†† of banks including the Reserve Bank.

The table below shows the movements in money supply with the public and its components during 1951, 1956, 1961, 1962 and 1963.

TABLE 89
MONEY SUPPLY WITH THE PUBLIC‡

(in crores of rupees)

End of	Currency with the public (including Hali Sicca currency††)		Deposit money with the public		Money supply with the public (including Hali Sicca currency††)	
	Amount	Annual Variation	Amount	Annual Variation	Amount	Annual Variation
1951	1,239.9	—31.1	564.8	—19.6	1,804.6	—50.7
1956	1,551.6	+100.8	659.9	+31.6	2,211.5	+132.4
1961	2,059.6	+92.2 (126.4)	780.8	+37.6	2,840.5	+129.8 (164.0)
1962	2,246.3	+186.7	874.4	+93.5	3,120.7	+280.2
1963	2,475.4	+229.1	1,063.8	+189.5	3,539.3	+418.6

NOTE : Figures shown in brackets ignore the return of Indian currency from Kuwait.

*Ignoring the return of Indian currency from Kuwait (Rs. 34.2 crores) between April and June 1961.

**Currency in circulation adjusted for balances held at treasuries and cash on hand with banks.

†Consisting of banks' loans and discounts to the private sector and holdings of private securities adjusted for public's time deposits with banks.

††Comprising capital and reserves and the difference of other liabilities and other assets.

‡Figures for 1962 and 1963 are provisional.

‡‡Up to 1956.

Currency

During 1963, currency in circulation* (including small coins) showed a further substantial rise of Rs. 234.8 crores (to Rs. 2,542.8 crores) as compared to Rs. 187.6 crores in 1962. The aggregate rise in currency in circulation since the end of 1952, when the present rising trend started, amounted to Rs. 1,313.7 crores or about 106.9 per cent.

Of the expansion in currency in circulation during 1963, notes accounted for Rs. 219.4 crores (as compared to Rs. 176.6 crores in 1962) and rupee coins (including one rupee notes) for Rs. 11.5 crores (as compared to Rs. 4.7 crores in 1962). The circulation of small coins, however, recorded a smaller rise of Rs. 3.7 crores in 1963 as compared to Rs. 6.2 crores in 1962. At the end of 1963, the circulation of notes, rupee coins and small coins stood at Rs. 2,296.5 crores, Rs. 159.9 crores and Rs. 86.4 crores, respectively.

Decimal Coins

The value of decimal coins issued up to the end of September 1963 was as follows .

TABLE 90
DECIMAL COINS IN CIRCULATION

Denomination	Value in lakhs of rupees
1 nP.	3,22.95
2 nP.	3,16.29
5 nP.	5,68.02
10 nP.	9,71.41
25 nP.	9,10.98
50 nP.	6,07.70
Rupee coin	12.20
Total	37,09.55

Demonetisation of Anna-Pie Coins

The Government of India have demonetised the cupro-nickel one anna, single pice and double pice coins, with effect from January 1, 1964. These coins shall, however, continue to be legal tender up to June 30, 1964 at the offices of the Reserve Bank of India, all agency and sub-agency offices of the Reserve Bank of India conducting Government business, and at all Government treasuries and sub-treasuries; they will also be accepted at all post and telegraph offices and all railway offices for payment of dues up to that date. The above-mentioned coins shall also continue to be legal tender at the offices of the Issue Department of the Reserve Bank of India.

Escudo Notes and Coins

The facilities provided for the exchange of Escudo notes and coins into Indian currency were made available up to July 14, 1962 and August 14, 1962 respectively. Later, the exchange was sanctioned, *ex-gratia*, in certain cases, during 1963, under instructions from the Central Government. The total amount exchanged into Indian currency so far, including the *ex-gratia* exchanges, amounts to Rs. 9.49 crores.

BANKING

During 1963, the expansion in deposits (excluding P.L. 480 and 665 funds) was the highest in any year so far, though the rate of growth was somewhat smaller than in 1962. A feature of deposit growth was the faster

*Figures are inclusive of notes and rupee coins held by banks and at treasuries but exclusive of Rs. 43 crores of India notes returned from Pakistan and awaiting cancellation.

rate of growth in demand deposits than in time deposits. Credit expansion in 1963 was smaller as compared to 1962 because of a record credit contraction in the slack season.

Scheduled bank deposits increased by Rs. 203.84 crores as compared to Rs. 216.95 crores in 1962, but excluding P.L. 480 and P.L. 665 deposits the rise worked out to Rs. 273.03 crores or 13.7 per cent as compared to Rs. 245.54 crores or 14.6 per cent in the preceding year. The continued high rate of deposit growth reflected the higher rate of deficit-financing during the year and the efforts made by banks for deposit mobilisation. Demand deposits rose during the year by Rs. 171.63 crores (to Rs. 990.85 crores) as against Rs. 91.97 crores (to Rs. 819.22 crores) during 1962. Time deposits, on the other hand, increased by only Rs. 32.20 crores (to Rs. 1,225.24 crores), as against Rs. 124.99 crores (to Rs. 1,223.04 crores) in 1962. Scheduled bank credit moved up by Rs. 152.48 crores or 10.7 per cent (to Rs. 1,574.86 crores) in 1963 as compared to Rs. 146.15 crores or 11.5 per cent (to Rs. 1,422.38 crores) in 1962. The credit-deposit ratio at 70.12 per cent at the end of 1963 was somewhat higher than the end-1962 level of 69.65 per cent. Investments in Government securities, which had risen by Rs. 72.81 crores (to Rs. 652.50 crores) in 1962, increased by Rs. 56.70 crores (to Rs. 709.20 crores) in 1963; when adjusted for P.L. 480 and P.L. 665 deposits, investments showed a rise of Rs. 126 crores as against Rs. 101 crores in 1962.

Cash reserves of scheduled banks, at Rs. 140.17 crores, showed an increase of Rs. 7.52 crores, in contrast to a fall of Rs. 22.87 crores in 1962. Scheduled bank borrowings from the Reserve Bank recorded a net decline of Rs. 12.96 crores as against a rise of Rs. 1.96 crores in the preceding year.

The variations in the principal items of assets and liabilities of scheduled banks during the last three years are shown in the following table.

TABLE 91
SCHEDULED BANKS—LIABILITIES AND ASSETS

(in crores of rupees)

	End 1961	End 1962	End 1963	Variation during 1962	Variation during 1963
Demand deposits	727.25	819.22	990.85	+91.97	+171.63
Time deposits	1,098.05	1,223.04	1,255.24	+124.99	+32.20
Aggregate deposits ..	1,825.30	2,042.25	2,246.09	+216.95	+203.84
(Excluding P.L. 480 and P.L. 665)	1,687.12	1,932.66	2,205.69	+245.54	+273.03
Inter-bank borrowings ..	39.11	51.81	47.60	+12.70	-4.21
Borrowings from R.B.I. ..	18.74	20.70	7.74	+1.96	-12.96
Borrowings from State Bank and/or notified banks ..	7.83	15.47	23.09	+7.64	+7.62
Cash in hand	54.08	53.71	60.55	-0.37	+6.84
Balances with Reserve Bank ..	101.44	78.94	79.62	-22.50	+0.68
Cash and balances with Reserve Bank	155.52	132.65	140.17	-22.87	+7.52
Investments in Government securities	579.69	652.50	709.20	+72.81	+56.70
(Excluding P.L. 480 and P.L. 665 funds)	441.51	542.91	668.80	+101.40	+125.89
Bank credit (advances, inland & foreign bills purchased and discounted)	1,276.23	1,422.38	1,574.86	+146.15	+152.48

Banks and Bank Offices

During 1963, one bank was included in the Second Schedule to the Reserve Bank of India Act, 1934, while two banks were excluded therefrom. The total number of scheduled banks thus declined from 81 to 80. The net

increase in the number of offices of scheduled banks (after adjustments for offices taken over as a result of amalgamations/taking over of liabilities and assets) came to 368, of which the State Bank of India accounted for 60. Consequently, the total number of offices of scheduled banks at the end of 1963 stood at 5,012 as against 4,644 at the end of 1962.

Credit Guarantee Scheme for Small-Scale Industries

A scheme for the guarantee of loans and advances granted to small-scale industries by approved credit institutions was instituted by the Central Government, as an experimental measure, from July 1, 1960 in 22 selected districts, and was later extended to 30 additional districts. From January 1, 1963, the scheme was placed on a permanent basis and its area of operation extended to cover the entire country. The scheme is administered by the Reserve Bank of India (designated as 'Guarantee Organisation') as agent of the Government. It provides for the sharing of losses in respect of guaranteed advances between the lending institutions and the Government of India. The maximum amount recoverable against guarantee issued under the scheme in respect of any one advance will not exceed Rs. 1 lakh. Recoveries, if any, made by the credit institutions subsequent to the payment of the claims are to be shared by them with the Government of India in the manner prescribed under the scheme. At present, 94 credit institutions viz., State Bank of India and its 7 subsidiaries, 51 other scheduled banks, 20 state co-operative banks, 14 State financial corporations and the Madras Industrial Investment Corporation Ltd., have been approved for the grant of facilities under the scheme. Other credit institutions can also avail themselves of the guarantee facility, under certain conditions. The scheme is applicable to advances granted to small-scale industrial units for the purpose of acquiring fixed assets or equipment or for providing working capital. A charge at the rate of $\frac{1}{2}$ per cent per annum on the maximum amount of advance as sanctioned is payable for the guarantee cover. For purposes of the scheme, a small-scale industrial unit has been defined as one in which the investment of a capital nature, including the capitalised value of rented premises but excluding the amounts spent on housing and amenities for workers, is not in excess of Rs. 5 lakhs.

From the inception of the scheme up to the end of 1963, the Guarantee Organisation received 8,407 applications for guarantee for limits aggregating Rs. 34 crores and issued 7,295 guarantees for a total sum of Rs. 27.26 crores. At the end of 1963 outstanding guarantees amounted to Rs. 14 crores.

Monetary and Credit Policy of the Reserve Bank

The Bank rate was raised by $\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent on January 2, 1963 leading to the simplification of the three-tier system of borrowing quotas and lending rates introduced on October 31, 1962 into a two-tier system. In October 1963, some relaxations were made in the two-tier system to enable banks to satisfy all credit demands for productive purposes.

During the year, the Reserve Bank's policy of granting special treatment to certain preferred sectors was carried a step further. In the January 1963 revision of the slab rates and quota system, banks' advances to small-scale industries and co-operatives were allowed as an additional quota at Bank rate but the quota at 6 per cent was reduced by the corresponding amount. From March 23, 1963, the additional quota at the Bank rate available to a bank in respect of such lending was granted in addition to its overall borrowing limit. The Export Bills Credit Scheme was also introduced in the same month, which enabled banks to borrow against their demand promissory notes and upon their holdings of usance export bills within the overall limits sanc-

tioned to each bank. Further, banks were allowed to borrow against rupee export bills at the Bank rate over and above the overall permitted level of borrowing, provided they agreed not to charge the exporters a rate of interest higher than $1\frac{1}{2}$ per cent above the Bank rate. In April 1963, advances to collieries, which were guaranteed under the Guarantee Scheme, were also treated as over and above the permitted level of borrowing so as to meet the special requirements of the coal industry.

Under the revised lending policy announced on October 30, 1963, scheduled banks' permissible quotas for borrowing from the Reserve Bank both against bills and Government securities were raised from 100 per cent to 150 per cent of their average statutory reserves and the slab rate system of lending was so modified as to enable banks to obtain accommodation on more favourable terms than before. Thus, banks can now borrow half of their quota (*i.e.* 75 per cent of their average statutory reserves) at the Bank rate ($4\frac{1}{2}$ per cent) and an equal amount at 6 per cent. Borrowings beyond this limit, that is, beyond 150 per cent of a bank's statutory reserves, will be treated, as at present, as special accommodation which would be granted only if the Reserve Bank is satisfied that the additional accommodation is justified on an overall assessment of the bank's position; such special accommodation will also be charged a rate of 6 per cent (as against $6\frac{1}{2}$ per cent earlier). Further, the banks will continue to get the additional quota at the Bank rate based on their lendings to small-scale industries and co-operative institutions, holdings of eligible usance rupee export bills, and advances to collieries which are guaranteed under the Guarantee Scheme.

In the field of open market operations, the Reserve Bank made sizeable net sales during 1963 as against smaller ones in 1962.

Selective Credit Control

During 1963, the selective credit control was operated by the Reserve Bank of India with a great deal of flexibility. The control in respect of advances against paddy and rice and other foodgrains (excluding wheat) was tightened by bringing under the purview of these directives, for the first time, advances against warehouse receipts covering these commodities. The directives on paddy and rice and 'other foodgrains' issued respectively in January 1963 and March 1963 prescribed ceiling limits commencing from January-February 1963 in respect of paddy and rice and from March-April 1963 in respect of 'other foodgrains' at the average aggregate level of advances in the corresponding period of 1962 inclusive of advances against warehouse receipts. A minimum margin of 25 per cent was also prescribed on advances against warehouse receipts covering these commodities. As, however, the inclusion of advances against warehouse receipts within the overall ceilings tended to produce a disproportionate decline in these advances, the directives were partially modified on May 16, 1963. Ceilings were placed on banks' 'other' advances, *i.e.* other than those against warehouse receipts with in the overall ceilings prescribed earlier, the balance being available for advances against warehouse receipts; also banks could make advances against warehouse receipts out of the limits fixed for other advances. Advances against warehouse receipts of warehouses established by the Central and State Warehousing Corporations on or after April 1, 1962 were exempted from the operation of the overall ceilings. Advances granted to co-operative marketing and processing units, however, continued to be exempted from the purview of the directive. In view of the firmness in sugar prices arising from lower output in the 1962-63 season and the spurt in advances to traders, the Bank issued a directive to scheduled banks on April 27, 1963 imposing a minimum margin of 45 per cent on credit limits or advances granted to parties manufacturing sugar in respect of stocks

which have left the factory premises and on which excise duty has been paid. The control in respect of advances against groundnuts was relaxed by allowing the ceiling limit on such advances to lapse by the end of February 1963; since then, bank advances against groundnuts and other oilseeds are subject only to minimum margin requirements of 45 per cent and 40 per cent, respectively. The minimum margin restriction on scheduled bank advances against ordinary shares, which was relaxed from 50 per cent to 40 per cent in January 1962, was completely withdrawn on October 30, 1963, in view of the stability in these advances and the changed situation in the capital market. The ban on investment by banks in *budla* transactions, however, continues to remain in force.

Deposit Insurance Corporation

The Deposit Insurance Corporation was set up on January 1, 1962, with the object of giving a measure of protection to depositors, in particular the small depositors, from the risk of loss of their deposits in the event of a bank's inability to meet its liabilities. Under the scheme, all functioning banks are registered as insured banks, their number being 264 at the end of September 1963. The amount of insurance cover provided by the Corporation is, for the present, fixed at Rs. 1,500 in respect of each depositor in each bank, in the same capacity and in the same right. Deposits of the Central and State Governments, foreign Governments and banking companies are not, however, covered by the scheme.

The Deposit Insurance Corporation Act, 1961 was extended to the Union Territory of Goa, Daman and Diu with effect from November 22, 1962 and to the Union Territory of Pondicherry, from October 1, 1963.

The Corporation's liability in respect of insured deposits under Section 16 of the Act has so far arisen in the case of three banks, viz., the Bank of China, which was ordered to be wound up by the Calcutta High Court, and the Unity Bank Ltd. and the Bank of Alagapuri Ltd. in respect of which schemes of amalgamation have been sanctioned by the Central Government. Payments in respect of the insured deposits of these banks were made by the Corporation during the year.

Banking Legislation

During 1963, amendments were made to the Reserve Bank of India Act, 1934, the Banking Companies Act, 1949 and the State Bank of India (Subsidiary Banks) Act, 1959 by the enactment of the Banking Laws (Miscellaneous Provisions) Bill, 1963. The main objective of the amending Act is to provide for control and supervision of the Reserve Bank over non-banking institutions accepting deposits from the public or carrying on other business which is allied to banking and to enhance and extend the powers of the Bank in relation to commercial banks in certain directions. The legislation received the President's assent on December 30, 1963. The various provisions of the Act will come into force from such dates as may be appointed by the Government of India for the purpose. Some of the important provisions of the amending Act are summarised below.

A new Chapter (III B) introduced in the Reserve Bank of India Act by the amending Act enables the Bank, *inter alia*, to regulate or prohibit the issue of any prospectus or advertisement by non-banking institutions soliciting deposits from the public and to call for returns and information from such institutions relating to deposits received by them. The Reserve Bank is also empowered to give directions to non-banking institutions in regard to the receipt of deposits, including the rates of interest payable, the period of deposit etc.; in the event of failure to comply with the directions, the Bank can prohibit the institution from accepting deposits. The Act also empowers the Bank to call for from financial institutions (*i.e.* institutions financing

trade, industry, commerce or agriculture or carrying on business of acquisition of shares, stocks, bonds, etc., or engaged in hire-purchase transactions) information or statements relating to their business, and to give directions to such institutions relating to the conduct of their business.

The amending Act deleted the statutory requirement which enjoined on the Issue Department of the Reserve Bank to hold as part of its assets Rs. 50 crores or one-sixth of the total assets in that Department, whichever is higher, in the form of rupee coins including one rupee notes. It also carried out amendments to certain procedural matters relating to notes issued by the Bank but not presented for payment within 40 years after the date of issue.

The amendments to the Banking Companies Act, 1949, among other things, (i) reduce the maximum voting rights of a shareholder of a banking company from five per cent of the total voting rights of all the shareholders to one per cent, (ii) prevent a banking company from granting unsecured loans to any company in which the chairman of the board of directors of the banking company appointed for a fixed term is interested as chairman or managing director of the company, if such company has no managing agent, or as managing agent or as director or partner of the managing agent of such company; the restriction would not apply to unsecured loans and advances granted by a banking company against trust receipts or bills of exchange arising out of *bona fide* commercial or trade transactions; this exemption is available also in respect of unsecured loans and advances granted by a banking company to its directors or to firms or private companies in which any of its directors is interested, and (iii) prohibit banking companies from remitting, except with the prior approval of the Reserve Bank, any debt due to it by any of its directors or by any company or firm in which any of its directors is interested as director, partner, managing agent or guarantor, or by any individual if any of the directors is his partner or guarantor. The amendments also empower the Reserve Bank (a) to issue directions to banks in regard to the maximum financial accommodation or the maximum amount of guarantees which they may grant in respect of a single party, (b) to remove from office any person associated with a banking company, if the Bank considers this to be necessary or desirable either in public interest or in the interest of the depositors or for better management of the banking company, and also to appoint a suitable person in place of the person removed from office: the aggrieved person can appeal to the Central Government against such removal by the Reserve Bank, and (c) to appoint for a period of three years one or more persons to hold office as additional directors, in the case of any banking company, provided that the number of such additional directors shall not, at any time, exceed five or one-third of the maximum strength fixed for the Board by the articles, whichever is less.

The amendment to the State Bank of India (Subsidiary Banks) Act, 1959 reduces the maximum voting rights, which a shareholder in the subsidiaries of the State Bank of India (other than the State Bank of India) can exercise, from five per cent of issued capital to one per cent.

CORPORATE SECTOR

The total number of joint stock companies at work in India on November 30, 1963 was 25,823 accounting for a total paid-up capital of Rs. 2,296.3 crores. Of these, the number of public and private limited companies was 5,958 and 19,865 with a paid-up capital of Rs. 1,112.4 crores and Rs. 1,183.9 crores respectively. The total number of companies limited by guarantee and associations not for profit was 1,158. The following table shows the number and paid-up capital of the companies at work at the end of March 1951, 1956, 1961, 1962, 1963 and November 1963.

TABLE 92
COMPANIES AT WORK

(Paid-up capital in crores of rupees)

Year ending March	Companies with share capital						Compa- nies limited by guaran- tee and associa- tions not for profit
	Public		Private		Total		
	No.	paid-up capital	No.	paid-up capital	No.	paid-up capital	
1951 ..	12,568	566.5	15,964	208.9	28,532	775.4	1,123
1956 ..	9,565	690.4	20,299	333.8	29,874	1,024.2	1,394
1961 ..	6,702	945.4	19,447	869.5	26,149	1,814.9	1,169
1962* ..	5,971	1,005.3	18,881	968.6	24,852	1,973.9	1,143
1963* ..	5,994	1,086.9	19,530	1,098.3	25,524	2,185.2	1,153
1963* ..	5,958	1,112.4	19,865	1,183.9	25,823	2,296.3	1,158
(November)							

Since April 1962, the number of companies at work recorded a continuous increase. Thus the gradual decline in the total number of companies at work noticed since 1956, as a result of the policy of striking off of moribund companies pursued by the Government, was arrested.

New Registrations

Between April and November 1963, 785 new companies with a total authorised capital of Rs. 136.6 crores were registered. Of these, 94 companies were public limited and 691 private limited, having an authorised capital of Rs. 67.9 crores and Rs. 68.7 crores respectively.

The following table shows the number of companies registered in different regions during the five years ending 1963 and between April and November 1963.

TABLE 93
REGION-WISE TRENDS IN NEW REGISTRATIONS

Region	1958-59	1959-60	1960-61	1961-62	1962-63	April— November 1963
Eastern ..	424	459	477	428	388	188
Western ..	254	318	431	414	371	225
Northern ..	211	242	323	381	343	212
Southern ..	206	433	452	391	395	160
TOTAL ..	1,095	1,452	1,683	1,614	1,497	785

Distribution

The following table shows the State-wise distribution of companies at work based on the location of their registered offices on March 31, 1963 and the new companies floated during the period April to November, 1963.

*Provisional.

TABLE 94
STATE-WISE DISTRIBUTION OF COMPANIES

State/Union Territory	Number of companies as on March 31, 1963	Companies registered during April-November 1963	
		Number	Authorised capital (in lakhs of rupees)
Andhra Pradesh	466	17	1,89
Assam	372	12	2,19
Bihar	338	12	61
Gujarat	890	45	3,96
Kerala	1,046	25	20,76
Madhya Pradesh	331	19	70
Madras	2,933	101	15,39
Maharashtra	5,152	152	21,70
Mysore	665	17	3,11
Orissa	216	11	1,47
Punjab	834	23	1,63
Rajasthan	434	6	63
Uttar Pradesh	1,068	32	1,21
West Bengal	8,754	152	17,67
Delhi	2,001	151	42,60
Himachal Pradesh	9	—	—
Manipur	5	1	1
Tripura	8	—	—
Andaman & Nicobar Islands	1	—	—
Goa	1	9	1,15
TOTAL	25,524	785	13,668

Government Companies

One hundred and sixty-seven Government companies, (*i.e.* companies in which the Central or a State Government or both own not less than 51 per cent of the share capital) were at work at the end of September 1963 with a paid-up capital of Rs. 849.4 crores.

Table 95 gives the number and paid-up capital of Government companies and the end of March 1951, 1956, 1961, 1962, 1963 and September 1963.

TABLE 95
GOVERNMENT COMPANIES

Year ending March	Number	Paid-up capital (in crores of rupees)
1951	36	26.3
1956	61	66.0
1961	142	546.4
1962*	154	627.7
1963*	160	786.0
1963* (September)	167	849.4

The table given below shows the State-wise distribution of Government companies based on the location of their registered offices. The five Government companies in Bihar account for 58.8 per cent of the total paid-up capital of all Government companies at work on September 30, 1963. Of these, the share of Hindustan Steel alone comes to 46.3 per cent.

*Figures are provisional.

TABLE 96
STATE-WISE DISTRIBUTION OF GOVERNMENT COMPANIES
(1963)

State/Union Territory	Number	Paid-up capital (in crores of rupees)	Percentage of total paid-up capital
Andhra Pradesh	6	7.03	0.83
Assam (including Manipur and Tripura)	6	1.14	0.12
Bihar	5	499.41	58.79
Gujarat	5	0.60	0.07
Jammu & Kashmir	1	0.08	0.01
Kerala	13	10.04	1.18
Madhya Pradesh	6	34.86	4.10
Madras	4	84.42	9.93
Maharashtra	14	36.79	4.33
Mysore	15	43.94	5.17
Orissa	49	4.16	0.49
Punjab (including Himachal Pradesh)	4	0.62	0.07
Rajasthan	4	2.01	0.24
Uttar Pradesh	5	1.35	0.19
West Bengal	9	20.95	2.47
Delhi	21	101.99	12.01
TOTAL	167	849.39	100.00

The following table shows the ownership pattern of Government companies at work at the end of September 1963. Out of the total paid-up capital of Rs. 849.39 crores, Rs. 761.89 crores, i.e., about 89.7 per cent. was owned by the Central Government.

TABLE 97
OWNERSHIP PATTERN OF GOVERNMENT COMPANIES (1963)

Type of Companies	Number	Paid-up capital (in crores of rupees)	Percentage of total paid-up capital
1. Central Government	41	761.89	89.69
2. Central and State Governments	3	21.83	2.57
3. Central and State Governments and private collaboration	6	4.04	0.48
4. Central Government and private interests	6	19.30	2.27
5. State Governments	41	17.72	2.09
6. State Governments and private interests	70	24.61	2.90
TOTAL	167	849.39	100.00

INSURANCE

Public and Private Insurance

Since September 1, 1956, when the Life Insurance Corporation of India was established, life insurance business in India is transacted by the Corporation and, in a restricted sphere, by the Posts and Telegraphs Department of the Government of India and by certain State Governments.

Fire, marine and miscellaneous classes of insurance business are transacted both by the Indian insurance companies and by foreign insurance companies operating in India. In addition, certain State Governments are also transacting such business.

State-run Insurance Schemes

The Governments of Andhra Pradesh, Jammu and Kashmir, Kerala, Madhya Pradesh, Mysore, Rajasthan, and Uttar Pradesh are transacting life insurance business, the benefits of which are restricted to their employees. With effect from September 1, 1956, the Life Insurance Corporation of

India acquired the exclusive privilege of carrying on life insurance business in India, but, in terms of clause (f) of Section 44 of the Life Insurance Corporation Act, the State Governments are enabled to carry on compulsory life insurance of their employees. The Governments of Gujarat and Maharashtra have an Insurance Fund for the insurance of all types of Government property in their commercial and industrial undertakings. The Government of Kerala is transacting fire and miscellaneous (motor) insurance business while the Government of Mysore is transacting miscellaneous (motor) insurance business.

Insurance Association of India

With the nationalisation of life insurance business in India, the Life Insurance Council of the Insurance Association of India and its Executive Committee have ceased to function. The membership of the General Insurance Council of the Insurance Association of India is confined to insurers carrying on general insurance business. The Executive Committee of the Council has evolved a code of conduct for observance by general insurers with the object of eliminating various alleged malpractices of rebating and payment of excessive commission. With a view to tightening control over general insurance business, the Executive Committee has recommended, *inter alia*, certain standards of solvency and the minimum departmental reserves to be maintained by insurers on a voluntary basis.

The Executive Committee has set up an administrative machinery to administer the code of conduct. The Chairman of the Executive Committee is the head of the organisation.

Another wing of the Association is entrusted with the regulation and control of the tariff structure in this business. The authority for this purpose is the Tariff Committee, which functions through four Regional Councils.

Compulsory Reinsurance

The Insurance Act, 1938 was amended by the Insurance (Amendment) Act, 1961 which came into force on April 1, 1961. Provision has been made therein (a) for compulsory reinsurance with approved Indian reinsurers by every insurer of such percentages, not exceeding 30 per cent. of his business, as may be specified by the Central Government, and (b) for constituting an Advisory Committee which has to be consulted by the Central Government before specifying the percentages of business to be reinsured and the proportions of the reinsurance business to be allocated among the approved reinsurers.

GENERAL INSURANCE

Insurance Companies

On December 31, 1963 there were 76 Indian insurers and 66 non-Indian insurers registered under the Insurance Act, 1938 for transacting various classes of general insurance business as shown below :

TABLE 98
NUMBER OF INSURANCE COMPANIES

Class or classes of insurance business for which registered	Indian	Non-Indian	Total
Fire	2	8	10
Marine only	11*	5	16
Miscellaneous only	9	3	12
Fire and marine only	—	3	3
Fire and misc. only	—	7	16
Marine and misc. only	—	—	—
Fire, marine and misc.	45	40	85
TOTAL	76	66	142

*These insurers are registered for marine (country craft) insurance business only.

Besides, the Life Insurance Corporation of India is also registered under the Act for the classes of life and miscellaneous insurance business.

The following table gives the summary of fire, marine and miscellaneous insurance business of Indian insurers in respect of their world business and of the non-Indian insurers in respect of their business in India for the year 1962.

TABLE 99
GENERAL INSURANCE—BUSINESS STATISTICS

	Indian Insurers			Non-Indian Insurers		
	Fire	Marine	Miscellaneous	Fire	Marine	Miscellaneous
Premium less reinsurance ..	16.65	7.63	19.73	3.74	2.15	3.17
Claims under policies less reinsurance	6.51	5.33	10.65	0.76	0.09	1.32
Net commission	2.93	0.37	3.06	0.05	0.07	0.34
Expenses of management ..	4.15	1.60	4.32	1.73	0.70	1.07

The following table shows the gross premium written direct by, and the net premium income of, insurers operating in India for the year 1962.

TABLE 100
GENERAL INSURANCE—PREMIUM INCOME

Class of insurance business	Gross Premium written direct			Net Premium income		
	Indian Insurers		Non-Indian Insurers	Indian Insurers		Non-Indian Insurers
	Inside India	Outside India	Inside India	Inside India	Outside India	Inside India
Fire	11.70	2.52	5.79	8.51	8.14	3.74
Marine	7.16	2.12	3.18	4.52	3.11	2.15
Miscellaneous	16.18	5.55	3.83	13.51	6.22	3.17
TOTAL	35.04	10.19	12.80	26.54	17.47	9.06

Assets and Investments

The total assets of the general insurance business of Indian insurers as on December 31, 1962 amounted to Rs. 82.03 crores as against Rs. 72.69 crores at the end of 1961 and Rs. 64.38 crores at the end of 1960.

The assets as on December 31, 1962 were invested as follows :

	(Per cent)
Central and State Government securities	10.8
Indian municipal, port and improvement trust securities	0.3
Shares and debentures of Indian companies	36.1
Foreign government securities	2.4
Agents' balances, outstanding premiums and amounts due from other insurers	20.5
Deposits, cash and stamp	19.8
Other assets	10.1
TOTAL	100.0

LIFE INSURANCE

The Life Insurance Corporation of India came into existence on September 1, 1956, the day notified for this purpose in the Life Insurance Corporation Act, 1956. The Corporation took over all the assets and liabilities appertaining to the controlled business of 245 insurers, including three State Insurance Departments.

The Corporation submitted an interim report on its activities on August 5, 1957, which covered the period up to June 1957. This was followed by the first statutory report which related to the period of 16 months from September 1, 1956 to December 31, 1957. The Corporation which adopted the calendar year from 1958 to the end of 1961 has thereafter decided to adopt the financial year.

On March 31, 1963, the Corporation had 36 divisional offices, 340 branch offices, 179 sub-offices and 175 development centres.

New Business

During the last accounting period (15 months ending March 1963), 19,42,062 proposals were received for assurances amounting to Rs. 838.75 crores and 17,67,544 policies were issued (being 91.0 per cent of the proposals received) assuring Rs. 745.96 crores. The figures for 1961 were 16,99,594 proposals for Rs. 702.93 crores and 14,69,664 policies assuring Rs. 608.82 crores.

A total of 6,76,654 policies (being 38.5 per cent of the total new policies in India) assuring Rs. 243.45 crores (being 31.8 per cent of the total new sums assured in India) were issued in the rural areas.

During the same period 7,12,524 policies (40.5 per cent of the total policies issued in India) assuring Rs. 155.67 crores were issued under the non-medical schemes.

The following table shows the comparative figures of new business transacted during the last five accounting periods.

TABLE 101
LIFE INSURANCE—NEW BUSINESS

Year	In India		Out of India		Total	
	Number of policies	Sum assured	Number of policies	Sum assured	Number of policies	Sum assured
		(Rs. crores)		(Rs. crores)		(Rs. crores)
1958	9,54,771	339.06	5,399	5.62	9,60,170	344.68
1959	11,43,387	419.70	7,912	9.47	11,51,299	429.17
1960	12,49,821	487.84	7,736	9.70	12,57,557	497.54
1961	14,61,608	598.79	8,056	10.03	14,69,664	608.82
1962-63* ..	17,58,046	734.72	9,498	71.24	17,67,544	745.96

Total Business in Force

The following table gives the business in force at the end of each of the last five years. The figures include the business under the Janata Policy Scheme.

TABLE 102
LIFE INSURANCE—TOTAL BUSINESS

Year	In India		Out of India		Total	
	Number of policies	Sum assured and bonuses	Number of policies	Sum assured and bonuses	Number of policies	Sum assured and bonuses
	(lakhs)	(Rs. crores)	(lakhs)	(Rs. crores)	(lakhs)	(Rs. crores)
1958	59.74	1,584	2.60	98	62.34	1,692
1959	66.73	1,855	2.56	103	69.29	1,958
1960	74.56	2,176	2.57	109	77.13	2,285
1961	83.41	2,623	2.40	115	85.81	2,738
1962-63* ..	92.61	3,054	2.26	114	94.87	3,168

*Fifteen months ending March 31, 1963

Foreign Business

The Corporation transacts new business in Aden, Fiji, Hong Kong, Kenya, Malaysia, Mauritius, Tanganyika, Uganda, the United Kingdom and Zanzibar.

During the accounting period*, the Corporation received from these countries 11,962 proposals for assurances amounting to Rs. 14.05 crores and issued 9,498 policies assuring a sum of Rs. 11.24 crores as against 9,762 proposals for assurances amounting to Rs. 12.08 crores and 8,056 policies assuring a sum of Rs. 10.03 crores during 1961.

Financing of Housing Schemes

During the accounting period 1962-63*, loans amounting to Rs. 17.35 crores were advanced to State Governments for financing various housing schemes. A sum of Rs. 3.52 crores was advanced to Apex Co-operative Housing Finance Societies in different States.

Other schemes for financing housing include (i) loans to co-operative housing societies formed by employees of the Life Insurance Corporation, (ii) loans to public limited companies for providing houses to their employees, and (iii) loans to co-operative housing societies of employees of public limited companies.

During the period, 27 new co-operative housing societies were formed by the employees of the L.I.C. at several centres, bringing the total number to 62 at the end of March 1963. So far, a sum of Rs. 54.84 lakhs has been sanctioned to 12 of these societies.

The 'Own Your Home' scheme, introduced in 1961, will come into operation in early 1964 at 26 selected places and will be extended to another 30 places during the year. Loans are already being advanced to policy-holders for construction of houses under this scheme.

Investments

The total book value of the investments of the Corporation at the end of March 1963 amounted to Rs. 678.81 crores. Of this, the total book value of the investments pertaining to the general business was Rs. 12.24 lakhs, to capital redemption business Rs. 4.53 lakhs, to annuity certain business Rs. 136.44 lakhs and to life business Rs. 677.28 crores.

The break-up of the investments pertaining to the life business of the Corporation on March 31, 1963 is given in Table 103.

*Fifteen months ending March 31, 1963.

TABLE 103
L.I.C. INVESTMENTS
(As on March 31, 1963)

(in lakhs of rupees)

	In India	Out of India
Central & State Government and other approved securities ..	448,54.88	—
Municipal securities not included above	69.61	—
Foreign Government, Municipal, etc., securities including loans to such authorities	—	15,22.62
Shares and debentures	124,77.06	48.76
Total stock exchange investments	574,01.55	15,71.38
Loans to State Governments for housing schemes	33,13.04	—
Amount due from State Governments in respect of the con- trolled business taken over	5,32.66	—
Loans to Municipal Committees guaranteed by Government ..	1,60.83	—
Loans to apex co-operative housing finance societies guaran- teed by Government	7,86.12	—
Loans to co-operative sugar factories guaranteed by Govern- ment	120.00	—
Fixed deposits guaranteed by Government	50.00	—
Total stock exchange investments and loans & deposits guaran- teed by Government	623,64.20	15,71.38
Loans on mortgage of property	8,83.69	9.65
House property	27,99.93	98.96
TOTAL ..	6,60,47.82	16,79.99

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Maximising India's food production

TABLE 105
AREA UNDER IRRIGATION

(in lakh acres)

Source	1950-51	1960-61	Increase or decrease
Canals	205	254	+49
Tanks	89	115	+26
Wells	148	174	+26
Others sources	73	59	-14
TOTAL	515	602	-87

The two outstanding features of agricultural production in India are the wide variety of crops and the preponderance of food over non-food crops. Table 106 shows the area under major crops in 1950-51, 1955-56, and 1960-61 to 1962-63.

TABLE 106
AREA UNDER PRINCIPAL CROPS

(in thousand acres)

Crop	1950-51	1955-56	1960-61*	1961-62*	1962-63**
Rice	7,61.35	7,78.91	8,29.47	8,46.50	8,59.61
Jowar	3,84.77	4,29.03	4,26.83	4,39.80	9,38.57
Bajra	2,22.96	2,80.18	2,82.30	2,73.22	2,64.70
Maize	78.07	91.32	1,07.74	1,11.03	1,13.16
Ragi	54.44	57.01	57.38	58.48	57.60
Small millets	1,13.80	1,31.84	1,21.01	1,17.84	1,15.73
Wheat	2,40.82	3,05.59	3,20.47	3,34.10	3,32.55
Barley	76.93	84.47	79.65	81.91	74.98
TOTAL CEREALS ..	19,33.14	21,58.35	22,24.85	22,62.88	22,56.90
Gram	1,87.06	2,41.66	2,32.44	2,35.85	2,27.19
Tur	53.89	56.60	59.07	58.09	58.40
Other pulses	2,30.80	2,75.52	2,81.89	2,91.34	2,88.81
TOTAL FOODGRAINS ..	24,04.89	27,32.03	27,98.25	28,48.16	28,31.30
Potatoes	5.92	6.91	9.13	N.A.	N.A.
Sugarcane	42.17	45.64	57.89	59.88	56.61
Black pepper	1.97	2.20	2.54	2.53	2.52
Chillies	14.64	14.93	15.30	15.16	15.40
Ginger	40	40	44	45	44
Tobacco	8.83	10.13	9.89	10.41	10.62
Groundnut	1,11.06	1,26.85	1,54.61	1,58.69	1,64.07
Castorseed	13.72	14.18	10.38	10.95	10.97
Sesamum	54.45	56.67	53.60	55.47	59.89
Rape and mustard	51.18	63.16	70.94	77.58	77.29
Linseed	34.67	37.77	44.33	48.54	46.53
Cotton	1,45.36	1,99.81	1,88.71	1,90.74	1,97.01
Jute	14.11	17.39	15.12	22.80	20.95
Mesta	—	5.71	6.89	9.60	8.61
Tea	7.77	7.80	8.19	N.A.	N.A.
Coffee	2.24	2.49	2.81	N.A.	N.A.
Rubber	1.44	1.74	3.18	3.45	N.A.
Coconut	15.36	15.98	17.71	17.86	N.A.

Seasons

There are two well-defined crop seasons : (i) kharif and (ii) rabi. The major kharif crops are rice, jowar, bajra, maize, cotton, sugarcane, sesamum and groundnut. The major rabi crops are wheat, barley, gram, linseed,

*Partially revised.

**Final estimates.

N.A.—Estimates not available.

rape and mustard. The seasons and duration of principal crops are shown below.

TABLE 107
CROP SEASONS

Crop					Season	Duration*	
Rice†	..	..	..	..	Winter	5½	—6 months
					Autumn	4½	—4½ "
					Summer	2	—3 "
Wheat	..	..	..	..	Rabi	4½	—5½ "
Jowar	..	..	..	..	Kharif	4½	—5 "
					Rabi	4½	—5 "
					Zaid Kharif	2½	—3 "
Bajra	..	..	..	..	Kharif	4½	—5½ "
Maize	..	..	..	..	Kharif	4	—4½ "
Ragi	..	..	..	..	Kharif	3½	—4½ "
Barley	..	..	..	..	Rabi	5	—5½ "
Gram	..	..	..	..	Rabi	6	—7 "
Sugarcane	..	..	..	..	Perennial	10	—12 "
Sesamum	..	..	..	..	Kharif	3½	—4 "
					Rabi	5	—6 "
					Kharif	4	—4½ "
Groundnut	..	..	..	..	Early	4½	—5½ "
					Late	4½	—5½ "
Rape and mustard	..	..	..	..	Rabi	4	—5 "
					Zaid Rabi	4	—5 "
Linseed	..	..	..	..	Rabi	5	—5½ "
Castor	..	..	..	..	Kharif	6	—7 "
					Others	8	—9 "
Cotton	..	..	..	..	Early	6	—7 "
					Late	7	—8 "
Tobacco	..	..	..	..	Kharif	7	—8 "
Jute	..	..	..	..	Kharif	6	—7 "

Production

Weather conditions and rainfall during 1962-63 were, on the whole, very unfavourable. The kharif season was marked by long spells of deficient rains in Madhya Pradesh, Gujarat, West Bengal and parts of Bihar and Orissa and ill-distributed rains in Maharashtra, Andhra Pradesh, Uttar Pradesh, Bihar and Assam. The rabi season was also characterised by absence of winter rains in the northern States. The total production of foodgrains was lower by about 22 lakh tons. While the production of rice, wheat, barley and gram registered a heavy decline, production of jowar, bajra, maize and tur was substantially higher, which helped to offset the overall fall in production to some extent. Production of groundnut, jute, mesta and sugarcane also declined but cotton recorded considerable increase. Table 108 shows the production of principal crops during 1950-51, 1955-56, and 1960-61 to

*Denotes the number of months the crop is on land.

†Seasons for rice in different States are known by different names. These are indicated below.

Assam ..	..	Autumn or Ahu or Aus	Gujarat and Maha-	Early
		Winter or Sali or Bao	rashtra ..	Middle
		Spring or Borro		Late
West Bengal ..	..	Autumn or Bhadoi or Aus	Madhya Pradesh	Early
		Winter or Aman		Late
		Summer or Borro		
Bihar ..	..	Autumn or Bhadoi	Madras ..	First Crop
		Winter or Aghani		Second Crop
Orissa ..	..	Autumn or Bhadoi	Uttar Pradesh ..	Early
		Winter		Late
Mysore ..	..	Winter or kharif or		
		Kartiki crop		
		Summer or rabi or		
		Vysakhi crop		

1962-63 and Table 109 shows the all-India index numbers of agricultural production of the various agricultural commodities and groups of commodities for these years.

TABLE 108
PRODUCTION OF PRINCIPAL CROPS

Crop	Unit	1950-51	1955-56	1960-61*	1961-62*	1962-63*
Rice (cleaned)	'000 tons	2,02,51	2,71,22	3,36,58	3,42,57	3,15,12
Jowar	"	54,08	66,19	92,15	76,19	91,92
Bajra	"	25,54	33,74	31,77	34,98	38,01
Maize	"	17,02	25,61	39,52	42,02	44,49
Ragi	"	14,07	18,17	16,54	18,44	18,84
Small millets	"	17,22	20,37	19,44	19,39	18,12
Wheat	"	63,60	86,22	1,08,18	1,18,49	1,09,56
Barley	"	23,40	27,71	28,21	31,02	24,35
TOTAL CEREALS	"	4,17,44	5,49,23	6,72,39	6,83,10	6,60,41
Gram	"	35,93	53,32	62,24	57,35	56,36
Tur	"	16,92	18,32	20,48	13,18	15,15
Other pulses	"	29,93	37,07	41,80	43,94	43,15
TOTAL FOODGRAINS	"	5,90,22	6,57,94	7,96,91	7,97,57	7,75,07
Potatoes	"	16,34	18,30	27,04	N.A.	N.A.
Sugarcane (cane)	"	5,61,50	5,95,87	10,24,82	9,82,76	9,00,60
Black pepper	"	21	28	28	28	25
Chillies (dry)	"	3,45	3,55	3,66	3,70	3,83
Ginger (dry)	"	14	16	17	17	17
Tobacco	"	2,57	2,98	3,07	3,43	3,61
Groundnut (nuts in shell)	"	34,26	38,01	43,91	46,11	45,20
Castorseed	"	1,01	1,23	89	99	1,01
Sesamum	"	4,38	4,60	3,16	3,73	4,46
Rape and mustard	"	7,50	8,46	13,35	13,16	12,79
Linseed	"	3,61	4,13	3,89	4,49	4,20
Cotton (lint)	'000 bales +	29,10	39,98	53,90	45,12	53,12
Jute (dry fibre)	" ++	32,83	41,98	39,82	63,47	53,67
Mesta (dry fibre)	" ††	—	11,53	11,31	16,92	15,22
Tea	lakh lbs.	63,70	62,80	70,80	N.A.	N.A.
Coffee	"	5,40	7,60	9,50	N.A.	N.A.
Rubber	"	3,20	5,00	5,60	6,00	N.A.
Coconut	crore nuts	3,58	4,37	4,59	4,55	N.A.

TABLE 109
INDEX NUMBERS OF AGRICULTURAL PRODUCTION
(Base : Agricultural Year 1949-50=100)

Commodity/Group	Weight	1950-51	1955-56	1960-61	1961-62	1962-63
A. FOODGRAINS						
Rice	35.3	87.9	114.2	136.2	139.0	127.0
Wheat	8.5	101.1	131.3	162.7	178.3	164.9
Total cereals (1)	58.3	90.3	114.9	136.6	140.0	133.0
Gram	3.7	98.0	138.9	162.3	149.5	146.9
Total pulses (2)	8.6	91.7	118.4	128.6	120.3	119.7
Total 'Foodgrains'	66.9	90.5	115.3	135.6	137.5	131.3

*Partially revised.

**Final estimates.

†392 lbs. each.

††400 lbs. each.

N.A.—Data not available.

(1) Includes jowar, bajra, maize, ragi, small millets and barley besides rice and wheat.

(2) Includes gram, tur and other pulses.

TABLE 109 (concl'd.)

Commodity Group	Weight	1950-51	1955-56	1960-61	1961-62	1962-63
B. OTHER CROPS						
Oilseeds						
Groundnut ..	5.7	101.4	112.4	131.7	138.3	135.6
Total oilseeds(3)	9.9	98.5	108.6	128.0	134.4	133.6
Fibres						
Cotton	2.8	110.7	153.9	203.3	170.2	200.4
Jute	1.4	106.3	135.8	121.6	193.8	163.9
Total fibres(4) ..	4.5	108.6	149.7	175.7	183.2	191.0
Plantation Crops						
Tea	3.3	103.8	107.2	120.9	133.5	129.7*
Coffee	0.2	112.3	196.1	355.1	240.1	278.8*
Rubber	0.1	93.8	146.1	165.3	176.3	204.8*
Total plantation crops	3.6	104.0	113.2	135.1	140.6	140.1
Miscellaneous						
Sugarcane ..	8.7	113.7	119.8	173.9	163.7	151.2
Tobacco	1.9	97.3	112.9	116.3	129.6	136.8
Total miscellaneous(5) ..	15.1	110.3	120.1	155.8	150.8	146.6
Total 'Other Crops'	33.1	105.9	119.9	147.9	149.2	148.0
GENERAL INDEX (All commodities)	100.0	95.6	116.8	139.7	141.4	136.8

Import of Foodgrains

During 1963, cereals were imported largely under agreements concluded earlier, notably the PL 480 Agreement of May 1960 with the US Government and also under fresh agreements concluded during the year. Of the four agreements signed in 1963 two were with Burma providing for the import of rice in two lots of 10,000 tons each; one with South Vietnam providing for the import of 10,000 metric tons of rice; and one with the UAR providing for the import of 35,000 metric tons of rice during 1964.

The following table shows the import of cereals into India for 1956 and 1961 to 1963.

TABLE 110
IMPORT OF CEREALS

(in thousand metric tons)

Year	Rice	Wheat and wheat flour	Other cereals	Total cereals
1956	3,30	1,113	—	1,443
1961	3,84	3,092	19	3,495
1962	3,90	3,250	—	3,640
1963	4,84	4,072	—	4,556

Food Situation

The overall food situation during 1963 remained fairly satisfactory, although some stresses and strains were noticeable in some parts of the country. This was mainly due to a substantial shortfall in the production of the two major cereals, rice and wheat, in 1962-63. Increased imports, larger internal procurement, tighter regulatory measures on trade and larger distribution of foodgrains through fair price shops helped to maintain supplies and check prices from rising to unduly high levels.

(3) Includes groundnut, sesamum, rape and mustard, linseed and castorseed.

(4) Includes mesta.

(5) Comprises sugarcane, tobacco, potato, pepper, chillies and ginger.

*Provisional.

DEVELOPMENT PROGRAMMES

The Third Plan provides for an outlay of Rs. 601.56 crores on programmes of agricultural production, including agricultural programmes under community development schemes, as against Rs. 260.65 crores in the Second Plan. This is in addition to the provision of Rs. 80.10 crores for co-operation and Rs. 599.34 crores for major and medium irrigation projects.

The financial outlays for agricultural programmes during 1964-65 have been stepped up as compared to those in previous years. An outlay of Rs. 146.7 crores has been approved for the State Plans in 1964-65 as compared to the anticipated outlay of about Rs. 110 crores in 1963-64 and the actual outlay of Rs. 85 crores in 1962-63 and Rs. 73 crores in 1961-62.

The principal technical programmes for increasing agricultural production, around which intensive work is being organised, are : (i) minor irrigation, (ii) soil conservation, dry farming and land reclamation, (iii) supply of manures and fertilisers, (iv) seed multiplication and distribution, (v) plant protection, and (vi) better ploughs and improved agricultural implements, and adoption of scientific agricultural practices.

In view of the national emergency a new impetus has been given to agricultural development programmes. The Third Plan target for minor irrigation, soil conservation on agricultural lands and dry farming have been stepped up. A programme for the intensification of rice production in 40 selected districts on 'package' basis has been initiated. A dry farming programme for increasing production of millets and pulses has been undertaken. The 'package' approach is also being extended to cotton, oilseeds and other important commercial crops. Programmes have also been drawn for the intensive development of milk, meat, eggs and short-term crops.

Various measures have been taken to secure effective and continuous coordination between the Ministries and Departments concerned at the Centre and between the Centre and the States in the formulation and execution of development programmes. With this end in view an Agricultural Production Board has been constituted at the Centre and Agricultural Production Committees have been constituted in the States.

Minor Irrigation

During the Third Plan it is proposed to bring an area of about 1.28 crore acres under irrigation through minor irrigation schemes as compared to 90 lakh acres during the Second Plan. The total outlay on minor irrigation during the Third Plan is likely to be Rs. 250 crores. Three regional minor irrigation conferences held in October 1961 have recommended that all savings under agricultural production sector should be diverted to this programme and additional finances may also be provided, if necessary. Increased emphasis is being laid on the fuller utilisation of irrigation facilities already created and on the maintenance of existing irrigation works, construction of field channels, and on surveys and investigations.

Many States have revised their Plan targets for minor irrigation in pursuance of the decision taken by the National Development Council in November 1962. Central assistance to the States for various minor irrigation schemes has been increased.

The additional area brought under irrigation through minor irrigation works during the two years 1961-62 and 1962-63 is estimated at 38 lakh acres while the target for 1963-64 was 30 lakh acres.

Soil Conservation, Dry Farming and Land Reclamation

An outlay of about Rs. 72 crores has been provided for the execution of various soil conservation programmes as against Rs. 1.6 crores in the First Plan and Rs. 18 crores in the Second Plan. The Plan targets for

contour bunding and dry farming have been raised to 117 lakh acres and 250 lakh acres respectively.

During 1963-64, 201 soil conservation schemes were in execution in the States along with 13 Central schemes in the catchment areas of river valley projects.

Under the All India Soil and Land Use Survey Scheme, an area of about 25 lakh acres had been surveyed during 1962-63 bringing the total area surveyed so far to 78 lakh acres. Sixty-nine soil survey and land use reports were provided to the States for use in planning and execution of soil conservation plans.

Improved Seeds

For the development and popularisation of improved seeds, it was envisaged under the Second Plan to organise about 4,000 seed multiplication farms in different States.

Under the Third Plan it is intended to extend the use of improved food-grain seeds over 14.8 crore acres. About 3.9 crore acres are expected to be covered by the end of the first three years of the Plan including the anticipated coverage of 1.64 crore acres during 1963-64.

The National Seeds Corporation started functioning during 1963-64 and produced hybrid maize seed over 1,500 acres.

Manures and Fertilisers

During 1962-63, urban compost was prepared in 2,218 urban centres and about 29 lakh tonnes was distributed. During 1963-64, the production was estimated at 33.5 lakh tonnes. Schemes for the utilisation of sewage and sullage were in operation in 90 important towns and cities, utilizing about 21.5 crore gallons of sewage and sullage water per day for irrigating about 30 thousand acres.

Under the schemes being implemented for the development of local manurial resources in C.D. Blocks and night soil composting in bigger panchayats about 10 crore tonnes of compost was expected to be produced during 1963-64. An area of 1.6 crore acres was estimated to have been green manured during 1962-63 while the anticipated achievement for 1963-64 was 2 crore acres.

The demand for nitrogenous fertilisers has been steadily increasing so that it has not been possible to meet the full requirements on account of inadequate indigenous production and shortage of foreign exchange. There was, however, an improvement and supplies in 1963-64 amounted to 4.4 lakh tonnes as against 3.5 lakhs tonnes in the preceding year. The consumption of superphosphate during 1962-63 accounted for about 74,000 tonnes and that of raw and steamed bone meal for 35-40,000 tonnes.

Plant Protection and Locust Control

The Directorate of Plant Protection, Quarantine and Storage assists the States and Union Territories with technical advice, equipment, pesticides and personnel in controlling crop pests and diseases through its 14 Central Plant Protection Stations. The stations also organise intensive plant protection work in selected Gram Panchayat areas and conduct fortnightly surveys of pests and diseases in their respective areas so as to adopt prompt control measures wherever necessary.

During 1963-64, only three exotic locust swarms entered India in June and July 1963. Thereafter, the country remained free of locust swarms and gregarious breeding.

Intensive Agricultural District Programme

With a view to exploiting to the full the production potentialities of some favourable areas with maximum irrigation facilities and minimum natural hazards, a scheme entitled 'Intensive Agricultural District Programme' was

sponsored during 1961-62 with financial assistance from the Ford Foundation. The programme has the two-fold objective of (a) increasing food production in order to meet the existing shortage as well as to provide a base for more rapid economic development and (b) demonstrating the most effective ways of increasing food production through concentration of resources, both human and material, and setting a pattern of extending such intensified agricultural programmes to other favourable areas having irrigation or assured water supply. The object is to promote the adoption of a combination of improved practices by the farmers by making available the needed wherewithal of production like credit, seeds, fertilisers, pesticides, implements, etc.

The programme, which will extend over a period of five years, will normally cover all the food crops grown in the district, emphasis being laid on major food crops like paddy, wheat and millets. It is also proposed to include livestock improvement programme and other related activities.

The scheme was launched in the first instance in seven selected districts, namely, West Godavari (Andhra Pradesh), Shahabad (Bihar), Thanjavur (Madras), Raipur (Madhya Pradesh), Ludhiana (Punjab), Pali (Rajasthan) and Aligarh (U.P.). In the districts to which the programme was subsequently extended, it completed one year of operation in Alleppey and Palghat (Kerala), Mandya (Mysore), Sambalpur (Orissa) and Surat (Gujarat) by the end of 1962-63. The programme was started in Burdwan (West Bengal) from the 1962-63 rabi season and in Bhandara (Maharashtra) and Cachar (Assam) from kharif 1963-64.

State Farms

A Central mechanised farm with an area of about 30,000 acres was established at Suratgarh in Rajasthan, in 1956. An area of 8,187 acres was sown in kharif and about 17,590 acres in rabi during 1963-64. The total production of crops grown at the farm during 1962-63 amounted to 17,700 tonnes. Experimental schemes for poultry development, cattle breeding and horticulture are in progress.

Work on a similar mechanised farm at Jetsar in the Rajasthan canal area is expected to start in the 1964-65 kharif season. Farms at a few more sites are also being contemplated.

AGRICULTURAL MARKETING

The Directorate of Marketing and Inspection carries out various schemes for (a) grading and standardisation of agricultural commodities, (b) regulation of markets and market practices, (c) marketing investigations and surveys, (d) training of personnel in agricultural marketing and (e) administration of Fruit Products Order, 1955.

Grading and Standardisation

The grading of agricultural and livestock produce is carried out under the provisions of the Agricultural Produce (Grading and Marking) Act, 1937. The commodities for export compulsorily graded under Section 19 of the Sea Customs Act are tobacco, sannhemp, wool, bristles, goat hair, lemongrass oil, palmrosa oil, sandalwood oil, vetiver oil, myrobalans and walnuts. Grading in respect of commodities intended for internal trade is being carried out on a voluntary basis for ghee, oils, butter, cotton, eggs, wheat flour, rice, potatoes, gur, fruits, honey, etc.

To provide adequate laboratory facilities for fixing grade standards for new commodities and for revising old grade standards where necessary, provision has been made in the Third Plan for the construction of a Central control laboratory at Nagpur and eight regional control laboratories at Guntur, Madras, Cochin, Kanpur, Rajkot, Amritsar, Calcutta and Bombay.

The first three have started functioning, while the existing laboratories at Rajkot, Kanpur and Bombay have been re-equipped for conversion into regional laboratories.

Regulation of Markets

Continuous attention is being paid to increasing the number of regulated markets in the country. The total number of regulated markets now stands at 1,035 as against 978 in the preceding year.

Marketing Investigations and Surveys

A large number of surveys on the marketing of agricultural commodities has been carried out and since 1937 the Directorate has published over 125 marketing survey reports and brochures relating to 40 important commodities. During 1963-64 survey reports on two more commodities and a directory of assembling markets were published.

A marketing research wing has been set up to study shift in marketing practices, consumption patterns and consumer preferences, costs and margins, transportation and packaging, revision of key indicators, etc.

Training of Personnel in Agricultural Marketing

There are three courses for training of personnel in agricultural marketing, viz., (i) one-year course at Nagpur for training superior personnel of the State Marketing Departments, (ii) five-month course organised at Sangli and Hyderabad for the training of marketing secretaries and marketing superintendents required for regulated markets, and (iii) three-month course for training grading supervisors. A new training centre for imparting the five-month course was started at Lucknow during 1963-64. The Central Government have sanctioned a stipend of Rs. 75 per mensem to each trainee for the one-year course and Rs. 50 per mensem each for the other two courses.

Administration of Fruit Products Order, 1955

Under the Fruit Products Order, 1955, enforcement of quality control and rendering advisory guidance for the promotion of the industry on sound scientific lines were carried out as before and 108 licences were granted or renewed during 1963-64.

FORESTRY

India's forests cover 2.69 lakh sq. miles, that is, about 22 per cent of the total geographical area of the country. The per capita forest area works out at only 0.2 hectares in India. Not only is the forest area proportionately smaller in India but it is also unevenly distributed and the productivity per acre per annum is substantially below the average yield of forests in other countries. In view of these facts, the National Forest Policy Resolution of 1952 proposed that the area under forests be steadily raised to 33.3 per cent of the total land area, the proportion to be aimed at being 60 per cent in hilly regions and 20 per cent in the plains. The table given below shows the area under forests in 1950-51, 1955-56, 1957-58 and 1958-59.

TABLE 111
AREA UNDER FORESTS

		(sq. miles)			
		1950-51	1955-56	1957-58	1958-59
1. From out-turn point of view					
(a) Merchantable	.. .. .	2,25,714	2,18,122	2,14,886	2,02,193
(b) Inaccessible	.. .. .	51,518	53,562	59,528	65,034
TOTAL		2,77,232	2,71,684	2,74,414*	2,69,462**

*Includes 3 sq. miles occupied by roads and buildings.

**Includes 1,235 sq. miles for which details are not available.

TABLE 111 (concl'd.)

			1950-51	1955-56	1957-58	1958-59
2. <i>By legal status</i>						
(a) Reserved	..	..	1,32,975	1,38,791	1,31,586	1,28,967
(b) Protected	..	..	45,532	65,067	93,759	97,178
(c) Unclassed	..	..	98,725	65,730	49,066	43,317
TOTAL	..		2,77,232	2,71,684*	2,74,411	2,69,462
3. <i>By composition</i>						
(a) Coniferous	..	..	14,017	9,736	10,041	10,334
(b) Broadleaved						
(i) Sal	..	..	40,747	41,849	38,756	43,890
(ii) Teak	..	..	16,784	22,445	19,205	31,345
(iii) Misl.	..	..	2,05,684	1,95,558	2,06,409	1,82,121
TOTAL	..		2,77,232	2,71,684*	2,74,411	2,69,462**

Production

Table 112 shows the quantity and value of timber and firewood produced during 1950-51, 1955-56, 1957-58 and 1958-59.

TABLE 112
PRODUCTION OF TIMBER AND FIREWOOD

Year	Quantity (thousand cubic feet)					Total value (thousand rupees)
	Timber	Round wood	Pulp and match-wood	Fire-wood	Charcoal wood	
1950-51	10,56,76	2,95,49	4,75	39,43,19	2,75,69	55,75,88
1955-56	11,98,67	2,54,37	14,81	32,60,57	5,56,61	52,85,03
1957-58	13,32,33	2,96,56	19,78	36,01,91	2,73,88	55,24,46
1958-59	13,14,41	3,22,37	23,29	39,12,38	3,12,19	58,84,64

Apart from providing the raw material for paper, match-wood and plywood industries, forests are also the source of a number of minor forest products like gum, resins, tanning materials, medicinal herbs, etc., which are essential for certain industries or serve as valuable articles of export. Table 113 shows the value of minor forest produce during the years 1950-51, 1955-56, 1957-58 and 1958-59.

TABLE 113
VALUE OF MINOR FOREST PRODUCE

(in thousand rupees)

Year	Bamboos and canes	Fibres & flosses	Gum and resins	Other minor products	Total
1950-51	1,52,20	52	41,93	4,98,03	6,92,48
1955-56	1,36,78	43	1,01,42	5,63,11	8,01,74
1957-58	1,34,59	82	1,25,61	5,93,18	8,54,20
1958-59	1,52,55	69	1,37,48	5,49,76	8,40,48

Development Schemes

Under the Third Plan, the forestry development programmes in the States include, among others, development of farm forestry, economic plantations, rehabilitation of degraded forests, improvement of forest communications and roads, development of forest research, nature conservancy schemes and forest protection measures. A special programme for growing fast-growing species suitable for industries like match, plywood, paper and pulp and boards has been launched, for which a provision of Rs. 2.75 crores has been made in the Third Plan. An area of about 60,000 acres is

*Includes 2,096 sq. miles for which details are not available.

**Includes 1,772 sq miles for which details are not available.

expected to be brought under quick growing species by the end of 1963-64 as against about 23,600 acres at the end of 1962-63. Two other projects are to be undertaken with assistance from the UN Special Fund. One of these aims at surveying the availability of raw materials and possibilities of industrial development in the inaccessible forest areas of Uttar Pradesh, Punjab, Himachal Pradesh, Orissa, Madhya Pradesh, Maharashtra, Kerala, Mysore and Andhra Pradesh. The other envisages the establishment of centres for imparting training in the use of modern logging equipment and techniques at different centres.

ANIMAL HUSBANDRY AND FISHERIES

Table 114 shows the number of livestock, poultry and agricultural machinery according to the quinquennial censuses of 1956 and 1961.

The Third Plan makes a provision of about Rs. 54 crores for animal husbandry. The object of Government policy in regard to the development of animal husbandry in the country is to develop the milk yielding capacity of well-defined milk breeds by selective breeding and upgrading of nondescript cattle, and improvement of draught breeds in milk yield without impairing the quality of bullocks. The above objects are sought to be achieved through Key Village Scheme, Gaushala Development Scheme, Gosadan Scheme, etc.

TABLE 114

LIVESTOCK, POULTRY AND AGRICULTURAL MACHINERY

						1956 census	1961 census
						(lakhs)	(lakhs)
A—Livestock							
1. Cattle							
(a)	Males over 3 years	..	..	..	..	6,49	7,25
(b)	Females over 3 years	..	..	..	..	4,99	5,42
(c)	Youngstock	..	..	..	..	4,38	4,88*
TOTAL CATTLE						15,87**	17,55
2. Buffaloes							
(a)	Males over 3 years	..	..	..	..	65	77
(b)	Females over 3 years	..	..	..	..	2,23	2,50
(c)	Youngstock	..	..	..	..	1,61	1,85
TOTAL BUFFALOES						4,49†	5,12
3. Sheep						3,92	4,02
4. Goats						5,54	6,09
5. Horses and ponies						15	13
6. Other livestock††						68	73
TOTAL LIVESTOCK						30,65	33,64
B—Poultry						9,48	11,42
C—Agricultural machinery							
1. Ploughs						(thousands)	(thousands)
(a)	Wooden	..	..	..	..	3,61,42	3,83,72
(b)	Iron	..	..	..	..	13,76	22,98

*Includes 22,33,255 for which details are not available.

**Includes 86,200 for which details are not available.

†Includes 1,760 for which details are not available.

††Comprises mules, donkeys, camels and pigs.

TABLE 114 (concl'd.)

	1956 census	1961 census
2. Carts	1,09,68	1,20,72
3. Sugarcane crushers		
(a) Worked by power	23	33
(b) Worked by bullocks	5,45	5,90
4. Oil-engines (with pumps for irrigation purposes) ..	1,23	2,30
5. Electric pumps (for irrigation purposes)	47	1,60
6. Tractors (used for agricultural purposes only) ..	21	31
7. Ghanies		
(a) Five seers and more	96	78
(b) Less than five seers	2,12	1,73

Key Village Scheme

The All India Key Village Scheme initiated during the First Plan with a view to increasing milk production and raising the draught efficiency of cattle in the country has been continued with an expanded scope in the Third Plan. Certain new measures like the establishment of central semen collection centres, in-service training centres and setting up of marketing cells in the Animal Husbandry Department have been proposed for implementation during the Third Plan. A provision of Rs. 5.10 crores has been made in the Third Plan for this scheme. During 1962-63, 21 key village blocks were expanded and work was intensified in another 15 blocks. In addition, 23 new blocks, 6 central semen collection stations, one marketing cell and four in-service centres were established.

Feed and Fodder Development Scheme

The feed and fodder development scheme provides for the establishment of fodder and pasture demonstration plots in villages, distribution of planting material of fodder crops to the cultivators, popularising silage making, feeding of selected cattle on balanced ration, pasture improvement at livestock farms and establishment of fodder demonstration-cum-training centres. The programme is being operated in 13 States and three Union Territories. During 1963-64 pasture development was taken up and demonstration plots were established on 8 livestock farms in key village blocks, the construction of 373 silo pits was subsidised and 382 chaff-cutters were distributed.

Calf Rearing Scheme

This scheme aims at the salvage of superior calves from high yielding milch animals maintained at the milk colonies. Under this scheme, the selected calves of 6 months' age and above are purchased from the cattle breeders and distributed free of cost to the bona fide cattle breeders, co-operative organisations, etc. During 1962-63, 6,441 improved calves were taken up for subsidised rearing in key village blocks. Up to November 1963, 1,192 calves were allotted from Haringhata and Aarey milk colonies.

Gaushala Development Scheme

This scheme aims at utilising the gaushalas in the country as cattle breeding-cum-milk production centres for supplementing governmental efforts for the supply of good breeding bulls and increasing milk production. It is proposed to take up the development of 168 gaushalas during the Third Plan. During 1962-63, 31 gaushalas were taken up for development.

Gosadan Scheme

This scheme aims at the segregation of un-economic and un-productive cattle from areas where active cattle development work has been taken up, to gosadans established in the remote forest areas. During the Third Plan, emphasis is being laid on the establishment of collection centres so as to

increase the number of admissions in the gosadans. During 1962-63, two gosadans were set up.

Stray and Wild Cattle Catching Scheme

The scheme for the rounding up of stray and wild cattle is in operation in Punjab, Uttar Pradesh, Madhya Pradesh, Jammu and Kashmir and Delhi. During 1963-64, up to January 1964, 8,013 cattle were rounded up, out of which 2,062 productive ones were distributed for breeding purposes and 4,500 unproductive ones sent to the gosadans.

Improvement of Hide Flaying, Curing & Carcass Utilisation Scheme

The Model Training-cum-Production Centre, Bakshi-ka-Talab, Lucknow, which was developed with assistance from the Netherlands Government and the FAO, imparts training in hide-flaying, tanning and footwear and leather utilisation.

Nomadic Cattle Breeders' Scheme

The scheme for rehabilitating nomadic cattle breeders in various States is being implemented in Andhra Pradesh, Rajasthan, Uttar Pradesh and Gujarat. It aims at providing breeders with better bulls and veterinary aid and their settlement on waste lands on co-operative basis. During 1963-64, a centrally sponsored scheme for the development of Rath, Tharparkar and Sanchoe breeds of cattle for rehabilitation of nomadic breeders was sanctioned.

Dairying

Dairy development programmes include establishment of city milk plants, colonisation of cattle, establishment of milk products factories and rural creameries, rural dairy extension and training of technical personnel.

With the establishment of three new dairy plants at Agra, Lucknow and Cuttack the total number of such plants now stands at 25. Dairy plants are also being set up at 20 other centres, preliminary work for 17 of these having been undertaken. Pilot milk schemes are in operation in 15 cities. Together, the dairy plants and pilot schemes are handling about 9 lakh litres of milk daily as against an average of 8.5 lakh litres during 1962-63.

The number of animals in the cattle colonies at Haringhata and Madhavaram has increased to 13,000. It is proposed to set up another cattle colony at Venkas near Bombay. A cattle feed compounding factory is being set up at Anand.

The Amritsar dairy project which was commissioned in December 1962 is designed for the marketing of 20,000 litres of milk daily and the manufacturing of 1,500 tons of spray-dried skim milk annually. A similar factory has been set up at Rajkot. Creameries have been started at Aligarh and Barauni and another one is being established at Junagadh.

Training in dairying has been taken up at five centres in Karnal, Bangalore, Aarey, Anand and Allahabad with the assistance of UNICEF. Another institute is being established at Haringhata. A students' dairy has been set up at Anand to be followed by similar dairies at some other centres. Special courses in dairy engineering and dairy extension have been started in Karnal.

Piggery Development Scheme

Two regional pig breeding stations-cum-bacon factories are in operation in Aligarh and Haringhata. Up to January 1964, these stations sold 285 boars and sows to other States for breeding purposes. The third regional station-cum-bacon factory was set up at Aarey in Maharashtra and the establishments of the fourth one at Kasarpalli in Andhra Pradesh has been sanctioned.

Poultry

Under the Second Plan, five regional poultry farms were set up in Maharashtra, Orissa, Mysore, Himachal Pradesh and Delhi. The production of eggs at these farms during 1963-64 was estimated at 15 lakhs as against 14 lakhs in 1962-63. About 65 lakh eggs were expected to be produced at the State poultry farms and extension centres, of which more than 20 lakh will be utilised for breeding purposes. In order to encourage commercial poultry farming 12 intensive poultry development blocks, 11 feed manufacturing units and four centres for collection, grading and distribution of eggs are expected to be set up. A large commercial farm has been started with foreign collaboration at Gurgaon. One more large breeding farm has been set up with foreign collaboration in Bombay. A centrally sponsored regional duck farm has been started in West Bengal.

Fisheries

The production of fish during 1962 was 958.6 lakh tons as against 945.9 lakh tons in 1961. The fall in production was accounted for by the failure of mackerel and sardine fisheries. The following table shows the production and disposal of fish in 1956, 1961 and 1962.

TABLE 115
PRODUCTION AND DISPOSAL OF FISH

(in thousand tons)

Year					Total catch and landings	Fresh marketing	Disposal		Reduction
							Cured		
							Sun-dried	Salted	
1956	..	..	..	..	996.3	425.5	258.1	247.0	65.7
1961	..	..	..	..	945.9	453.2	219.4	193.9	79.4
1962	..	..	..	..	958.6	459.2	222.3	196.5	80.6

There is a sizable foreign trade in fish and fish products. During 1962-63, 10,862 metric tons of fish and fish preparations valued at Rs. 4.08 crores were exported and 31,528 metric tons valued at Rs. 6.16 crores were imported.

Fisheries development programmes fall into two parts, marine fisheries and inland fisheries. Schemes for the former consist of mechanisation of fishing craft, exploratory and experimental fishing to locate new grounds, improvement of fishing methods, increasing the supply of fishery requisites and provision of facilities for landing, preservation, transport and marketing of fish. Schemes relating to the development of inland fisheries aim at increasing production through surveys, introduction of fish culture techniques, investigation of fish seed resources and development of reservoir fisheries.

Mechanisation of fishing craft and the development of suitable designs of mechanised craft for different coastal regions were undertaken during the first two Plans. There are at present about 2,750 mechanised boats as against 1,500 at the end of the Second Plan period.

The construction of a fishing harbour at Veraval in Gujarat started during the Second Plan is nearing completion. The construction of a fish landing jetty at Mangalore has been completed and of fishing harbours at Nagapattinam in Madras, Kakinada in Andhra Pradesh, Porbunder in Gujarat and Vizhinjam in Kerala initiated.

The fish marketing organisations in the country are being gradually strengthened to meet the growing needs of the fish industry. Refrigerated railway vans run between Calicut and Madras and Palasa and Howrah. It is proposed to add three more vans.

Research and training in inland fisheries is carried out at the Central Inland Fisheries Research Institute, Barrackpore, and in sea fisheries at the Central Marine Fisheries Research Institute at Mandapam Camp. The Deep Sea Fishing Station, Bombay and the off-shore stations at Tuticorin, Cochin and Visakhapatnam conduct exploratory surveys for charting grounds. A new off-shore station has been established at Mangalore. Studies on fishing gear pertaining to gear materials and their preservation, gear designs and fishery products are conducted at the Central Fisheries Technological Research Station at Cochin and Ernakulam. The Central Institute of Fisheries Education was established at Bombay in July 1961. It imparts practical knowledge on all aspects of fisheries including administrative and extension methods. A Central institute of fisheries co-operatives was established at Ernakulam in July 1963.

Eight central fisheries extension units organise training courses for different categories of personnel. Technical assistance is also provided by these units in the application of scientific methods of fish culture. Experiments on induced breeding are also conducted.

The administration of the Indo-Norwegian project which had been under the Kerala Government from its inception was taken over by the Central Government from April 1963. Its headquarters has been shifted to Ernakulam.

Fisheries schemes in the Third Plan have been formulated with the main objective of increased production and the development of export trade. Measures to improve the condition of fishermen have also been given due consideration.

As a result of programmes included in the Third Plan, for which a provision of Rs. 29 crores has been made, an increase of four lakh tons in production and a doubling in exports are expected.

AGRICULTURAL LABOUR

The first Agricultural Labour Enquiry was conducted in 1950-51, in 800 villages, covering a sample of 11,000 agricultural labour families. The reports of the enquiry were published in 1954-55. The second Agricultural Labour Enquiry was conducted in 1956-57, in 3,600 villages and data on employment, unemployment, wages and earnings, income, expenditure and indebtedness were collected from about 28,560 sample agricultural labour households. One of the main objects of the enquiry was broadly to assess the impact of developmental schemes undertaken during the First Plan on the condition of agricultural labourers.

The all-India report of the second enquiry was published in 1960. A summary of the main results of the second enquiry along with a comparison* with the corresponding data of the first enquiry is given below.

Occupational Structure

(i) The estimated number of agricultural labour households was 1.63 crores in 1956-57 as against 1.79 crores in 1950-51, i.e. a fall of 16 lakhs. This reduction might be mainly due to conceptual difference in the definition of the term "agricultural labour households" adopted during the two enquiries.

(ii) The landless agricultural labour households in 1956-57 accounted for 57 per cent of the total as against 50 per cent in 1950-51.

*Certain changes, in the light of improved international standards, were made in concepts, definitions and procedures adopted in the Second Enquiry as compared with those in the First. For a proper comparative study of the results of the two enquiries, especially those relating to the number of agricultural labour households, employment and wage rates, reference may be made to the Report of the Second Enquiry in which these changes have been explained at relevant places.

(iii) The proportion of attached and casual agricultural labour households was 10 : 90 in 1950-51. In 1956-57, attached labour households accounted for about 27 per cent of the all-India total, the remainder being casual labour households. The increase may, to some extent, be due to resumption of personal estates for self-cultivation by the erstwhile intermediaries like zamindars, jagirdars, talukdars, etc., in the different States.

(iv) The average size of the agricultural labour households rose slightly to 4.40 in 1956-57 from 4.30 in 1950-51. The average number of wage earners was 2.03 per household during 1956-57, comprising 1.13 men, 0.74 women and 0.16 children. The corresponding figures for 1950-51 were 2.0 wage earners, comprising 1.1 men, 0.8 women and 0.1 children.

(v) The estimated number of agricultural labourers during 1956-57 was 3.3 crores composed of 1.8 crore men, 1.2 crore women and 30 lakh children. The corresponding figures for 1950-51 were 3.5 crores consisting of 1.9 crore men, 1.4 crore women and 20 lakh children.

Employment and Unemployment

(i) Casual adult male workers were employed, on an average, on wages for 200 days in 1950-51 and for 197 days during 1956-57. They were self-employed for 75 days in 1950-51 and for 40 days in 1956-57.

(ii) Casual adult female workers were employed on wages for 134 days during 1950-51 and for 141 days during 1956-57.

(iii) The wage-employment of children increased from 165 days in 1950-51 to 204 days in 1956-57.

(iv) Casual adult male workers were unemployed for 128 days in 1956-57, as compared to 90 days in 1950-51.

Wages

(i) About 76 per cent of the average income of agricultural labour households was derived from wage-employment in agricultural operations as well as from non-agricultural occupations during 1950-51 as against 81 per cent during 1956-57. About 56 per cent of the man-days worked were paid for in cash in 1950-51 and 48.7 per cent in 1956-57. Payments made entirely in kind accounted for 31.3 per cent in 1950-51 and 40.5 per cent in 1956-57. Wage-payments made partly in cash and partly in kind related to 9.8 per cent of the total man-days worked in the first enquiry and formed 10.8 per cent in the second enquiry.

(ii) The average daily wage rate of adult male workers decreased from 109 nP. in 1950-51 to 96 nP. in 1956-57, and the average daily wage-rate of adult women also fell from 68 nP. in 1950-51 to 59 nP. in 1956-57. Child labour received an average wage of 70 nP. in 1950-51 and 53 nP. in 1956-57.

(iii) The estimated wage-bill in agriculture worked out to roughly Rs. 520 crores in 1956-57 as against Rs. 500 crores in 1950-51. The increase was mainly due to the proportion of attached labour households being considerably higher (above 27 per cent) in 1956-57 as compared with 1950-51 (about 10 per cent) and the average annual income per attached labour household as also of all households taken together from agricultural wage-employment in 1956-57 being higher than in 1950-51.

Household Income

(i) The average annual income of an agricultural labour household in 1950-51 was Rs. 447, while in 1956-57 it was Rs. 437.

(ii) The average income derived from different sources, during the first and second enquiries, by agricultural labour households is given in the following table.

TABLE 116
SOURCES OF INCOME*

							(in rupees)	
							1950-51	1956-57
Cultivation of land	..	..	..	..	..	..	59.90 (13.4)	30.07 (6.85)
Agricultural labour	..	..	..	..	..	..	286.97 (64.2)	319.65 (73.04)
Non-agricultural labour	..	..	..	..	..	..	53.19 (11.9)	34.04 (7.99)
Others	..	..	..	..	..	..	46.94 (10.5)	52.91 (12.10)

Income from farming and non-agricultural labour had declined during 1956-57 but that from agricultural labour had increased.

Consumption and Cost of Living

(i) The average annual consumption expenditure per agricultural labour household increased from Rs. 461 in 1950-51 to Rs. 617 in 1956-57. The percentage expenditure on different consumption groups is given below.

TABLE 117
CONSUMPTION EXPENDITURE

							(percentage of total)	
Consumption group							1950-51	1956-57
Food	..	..	..	..	..	..	85.3	77.3
Clothing and footwear	..	..	..	..	..	..	6.3	6.1
Fuel and lighting	..	..	..	..	..	..	1.1	7.9
Miscellaneous and service	..	..	..	..	..	..	7.3	8.7

(ii) The average income per household during 1956-57 was Rs. 437 while average consumption expenditure was Rs. 617. The deficit was thus Rs. 180. This deficit, to a considerable extent, would seem to have been met from past savings, sale of stocks, remittances received and loans.

Indebtedness

(i) About 64 per cent of agricultural labour households were indebted during 1956-57 as against 45 per cent in 1950-51. The average accumulated debt per household increased from Rs. 47 in 1950-51 to Rs. 88 in 1956-57.

(ii) The average debt per indebted household also rose from Rs. 105 in 1950-51 to Rs. 138 in 1956-57. One of the reasons for the higher percentage of indebted households as also the higher volume of debt in 1956-57 was the higher proportion of attached labour households, some of whom were under debt bondage and/or tie-in-allotment.

(iii) The total estimated volume of indebtedness of agricultural labour households in 1956-57 was Rs. 143 crores as against Rs. 80 crores in 1950-51.

(iv) Of the total debt, about 46 per cent was incurred for meeting the consumption expenditure. Social purposes accounted for 24 per cent and productive purposes for 19 per cent, the remaining 11 per cent of the total debt being incurred for meeting the expenditure on other miscellaneous items.

(v) Of the total loan, 34 per cent was taken from money-lenders, 44 per cent from friends and relatives, 15 per cent from employers, 5 per cent from shop-keepers and one per cent from co-operatives.

*Figures in brackets are percentages of total income from all sources.

Minimum-Wage Fixation in Agriculture

One of the protective measures to improve the income of agricultural labourers is the Minimum Wages Act, 1948 which *inter alia* applies to employment in agriculture. Under this legislation, minimum wages for agricultural workers have been fixed throughout Kerala, Orissa, Punjab, Rajasthan, Delhi, Andhra Pradesh, Bihar, Madhya Pradesh, Mysore, Uttar Pradesh, West Bengal, Himachal Pradesh and Tripura and in specified areas in Assam, Gujarat, Maharashtra and Madras. Minimum wages have also been fixed by the Central Government in certain agricultural demonstration farms and military farms under the Central Ministries of Food and Agriculture and Defence respectively.

CHAPTER XVII

LAND REFORM*

The First Five Year Plan recognised that the pattern of land ownership and cultivation was a fundamental issue in national development. The policy was restated in the Second Plan and the objectives aimed at were, firstly, to remove such impediments in the way of agricultural production as arise from the character of the agrarian structure and to create conditions for evolving as speedily as possible an agrarian economy with high levels of efficiency and productivity and, secondly, to establish an egalitarian society and eliminate social inequalities.

The Third Plan envisages as the main task during this period the completion of the implementation of policies evolved during the Second Plan and embodied in legislation on the various aspects of land reform which States have undertaken in pursuance of the accepted policies.

A number of States have made considerable progress in the implementation of the legislation in recent years. The present position was reviewed by the National Development Council in November 1963. The Council called upon all State Governments to complete implementation of land reform before the end of Third Plan and set up a Committee to suggest measures for strengthening and improving the implementation.

ABOLITION OF INTERMEDIARIES

The programme for abolition of intermediaries has been mostly completed. These measures have brought more than two crores of tenants into direct relationship with the State and made available to the Government considerable areas of cultivable waste lands for distribution to landless agriculturists.

The main problem now engaging the attention of the State Governments is the assessment and payment of compensation. About Rs. 236 crores have been paid so far, Rs. 106 crores in cash and Rs. 130 crores in bonds. About Rs. 334 crores have yet to be paid.

TENANCY REFORM

The principal objectives of tenancy reforms recommended in the Plan are (i) security of tenure, (ii) reduction of rent, and (iii) ownership for tenants. The progress made in these directions in different States is outlined below :

Andhra Pradesh

In the former Andhra area, the existing provisions for security of tenure are of a temporary nature. In the Telangana area, the *Hyderabad Tenancy and Agricultural Lands Act* applies. Some of its provisions conferring substantial rights on tenants have, however, not been enforced. A comprehensive tenancy legislation for the entire State of Andhra Pradesh is under consideration of the State legislature.

In the former Andhra area, the rent is not to exceed 50 per cent of the gross produce for irrigated lands (28-1/3 per cent for lands irrigated by baling and 45 per cent of produce for dry lands). In the Telangana the rent is not to exceed one-fourth of the gross produce for irrigated lands and one-fifth in other cases or 3 to 5 times the land revenue according to the class of soil, whichever is less.

*For a brief account of the genesis and growth of the agrarian problem, see Chapter XXI of 'INDIA 1958'

The former Government of Hyderabad had enforced the provision for transfer of ownership to tenants in certain areas of Telangana region. About 14,000 tenants have exercised right of purchase over an extent of a lakh acres.

Assam

Under-*raiyats* and share croppers (*adhiars*) have been given fixity of tenure subject to landlord's right to resume land for personal cultivation. Each under-*raiyat* or *adhiar* is, however, to be left with 3-1/3 acres until he is allotted alternative land of equivalent value in the locality.

Right of resumption expired on February 18, 1963. The crop share paid by the *adhiar* is not to exceed one-fourth of the produce where the cost of cultivation is met by the landlord and 1/5th where the cost is met by the *adhiar*.

There is no provision for conferment of ownership on tenants in respect of non-resumable areas.

Bihar

The tenant holding land on a written lease is liable to ejection on the expiry of the term of the lease. Tenants holding land on oral lease cannot be evicted except for misuse of land or non-payment of rent. An under-*raiyat* holding from landlords more than the ceiling limit (20 to 60 acres depending upon the class of land) has been given fixity of tenure subject to landlord's right to resume land for personal cultivation. A minimum area is, however, to be left with the tenant.

Gujarat

Tenants have been given security of tenure subject to landlord's right to resume land on the condition that every tenant generally retains half the area leased. The period within which right of resumption could be exercised has expired.

In the former Bombay area, 9.20 lakh tenants are eligible for acquisition of ownership of an area of 30.6 lakh acres. The actual ownership is transferred on payment of purchase price. So far the work relating to rent fixation has been completed in about 3 lakh cases covering about 10 lakh acres.

Jammu and Kashmir

Tenants have fixity of tenure in respect of area which the landlord did not resume before 1956. A landlord whose holding exceeds 12½ acres is entitled to receive as rent one-fourth of the produce for wet land and one-third of the produce for dry land.

There is no provision for transfer of ownership to tenants.

Kerala

The *Kerala Land Reforms Act*, provides for fixity of tenure for tenants subject to landlord's right to resume land for personal cultivation in specified cases. The rate of maximum rent has also been laid down for various crops. For paddy lands the fair rent normally is one-fourth of the gross produce. Provision has also been made for transfer of ownership to tenants in respect of non-resumable land.

Madhya Pradesh

Tenants have been conferred fixity of tenure in respect of a minimum area. The rent is not to exceed 2 to 4 times the land revenue. Provision has also been made for transfer of ownership to tenants.

Madras

An interim measure for protecting tenants from eviction was enacted in 1955. Rent is not to exceed 40 per cent the produce for irrigated land (35

per cent where irrigation is supplemented by lift irrigation and 33-1/3 per cent in other cases).

Maharashtra

Tenants have been given fixity of tenure in respect of lands subject to right of landlord to resume for personal cultivation. The period within which right of resumption could be exercised has already expired.

Provision has also been made for transfer of ownership to tenants. In the former Bombay area ownership in respect of 15 lakh tenants would be transferred. Out of these about 10 lakh enquiries have been completed and more than 3 lakh tenants have acquired ownership of 10 lakh acres of land. In Marathwada area 39,000 tenants were declared owners in respect of 4½ lakh acres.

Mysore

A comprehensive Land Reform Bill applicable to the entire reorganised State of Mysore was enacted in 1961, providing for fixity of tenure subject to the landlord's right to resume two-thirds to three-fourths of the area leased subject to a maximum of 25 standard acres. The Act has not yet been enforced. Interim protection to tenants has, however, been extended.

Orissa

A comprehensive Land Reform Bill has been enacted which provides for fixity of tenure subject to the landlord's right to resume two-thirds to three-fourths of the area leased subject to a maximum of 25 standard acres. Tenants in non-resumable areas are to be provided with ownership rights.

Punjab

Tenants have been given security of tenure subject to landlord's right of resumption. The tenant is to be left with at least 5 standard acres. The maximum rent is not to exceed one-third of the gross produce. More than 15,000 tenants have acquired ownership with an area covering a lakh acres.

Rajasthan

Tenants have been given security of tenure subject to landlord's right of resumption. The tenant, however, is to be left with a minimum area (yielding net annual income of Rs. 1,200) in all cases. In 23 districts, out of 1,70,000 tenants eligible for conferment of *khatedari* rights, 1,27,000 tenants have been recorded as owners.

Uttar Pradesh

All tenants and sub-tenants have been brought into direct relationship with the State.

West Bengal

All rent-receiving interests have been acquired by the State and the under-*raiyats* and tenants have been brought into direct relationship with the State. Crop sharers (*bargadars*) do not get tenancy status but have fixity of tenure subject to owner's right to resume two-thirds of the areas leased. In case a person owns less than 7½ acres he can resume the entire area from the *bargadars*. Crop share is not to exceed 50 per cent of the produce if the landlord contributes the cost of cultivation, and 40 per cent if he does not.

Union Territories

In Delhi, tenants have been brought into direct contact with the State. In special cases where tenancies continue, rent is not to exceed one-fifth of gross produce or four times the land revenue.

In Himachal Pradesh, tenants of owners paying more than Rs. 125 as land revenue have been brought into direct contact with the State. The landlord can resume for personal cultivation one-fourth of his tenancy

subject to a maximum limit of 5 acres. The rent is not to exceed one-fourth of the gross produce.

In Manipur and Tripura comprehensive legislation has been enacted providing for fixity of tenure to tenants, subject to landlord's right to resume and conferring ownership rights in non-resumable areas. Rent is not to exceed 1/5 to 1/4 of the produce or four times the land revenue.

CEILING ON HOLDINGS

Legislation for ceiling on holdings has been enacted in all the States except in the former Punjab area of the State of Punjab. Although there is no outright ceiling on ownership in this area, Government have been empowered to settle tenants on lands under personal cultivation of owners in excess of the permissible limits.

Ceiling has two aspects namely (i) ceiling on future acquisition, and (ii) ceiling on existing holdings. Ceilings imposed in different States and Territories are as follows :

State	Future Acquisition	Existing Holdings
Andhra Pradesh	18 to 250 acres	27 to 324 acres
Assam	50 acres	50 acres
Bihar	20 to 60 acres	20 to 60 acres
Gujarat	19 to 132 acres	19 to 132 acres
Jammu and Kashmir	22½ acres	22½ acres
Kerala	15 to 37½ acres	15 to 37½ acres
Madhya Pradesh	25 to 75 acres	25 to 75 acres
Madras	24 to 120 acres	24 to 120 acres
Maharashtra	18 to 126 acres	18 to 126 acres
Mysore	18 to 144 acres	27 to 216 acres
Orissa	25 to 100 acres	25 to 100 acres
Punjab	30 standard acres	30 standard acres
Rajasthan	30 standard acres	30 standard acres
Uttar Pradesh	12½ acres	40 acres
West Bengal	25 acres	25 acres
Himachal Pradesh	30 acres in Chamba district and land assessed at Rs. 125 in other areas.	30 acres in Chamba district and land assessed at Rs. 125 in other areas.
Manipur	25 acres	25 acres
Tripura	25 to 75 acres	25 to 75 acres

Some progress has been made in the implementation of legislation regarding ceilings. In Jammu & Kashmir, during the Second Plan period, 4.5 lakh acres were taken over and distributed. The West Bengal Government has come into possession of 5,24,000 acres of agricultural land which is being leased out to share-croppers and landless workers on a yearly basis pending its final disposal; further area will become available as implementation proceeds. In Uttar Pradesh 1,40,000 acres have been declared surplus, of which 24,000 acres have been distributed. In Maharashtra about 90,000 acres held by sugar factories have been declared surplus and 35,000 acres have been taken over by the State Government. Pending formation of co-operative farming societies, this area is to be managed by the Maharashtra State Farming Corporation. In Andhra Pradesh 52,000 acres of surplus land have been located so far. In Assam, Bihar, Gujarat, Madhya Pradesh, Madras, Delhi, Himachal Pradesh and parts of Tripura the provisions in the legislation relating to ceilings have been brought into force.

CONSOLIDATION OF HOLDINGS

By the end of the Second Plan, about 2.95 crore acres had been consolidated. The target proposed for the Third Plan was 3.10 crore acres. During the first two years of the Plan about 1.46 crore acres have been consolidated and, at the end of 1962-63, consolidation work was in progress

over nearly 80 lakh acres. Of the total 4.40 crore acres consolidated so far, 1.96 crore were consolidated in Punjab, 1.3 crore in Uttar Pradesh, 45 lakhs in Madhya Pradesh, 36 lakhs in Rajasthan and 28 lakh acres in Maharashtra.

SUB-DIVISION AND FRAGMENTATION

The operation of the laws of inheritance and unregulated transfers and leases have resulted in sub-division and fragmentation of holdings to the detriment of agricultural production. The policy is to restrain this tendency by regulating transfers, partitions and leases.

Legislation has been enacted for this purpose in Assam, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Uttar Pradesh, West Bengal, Manipur, Tripura and in the former Hyderabad areas of Andhra Pradesh and Mysore. It has, however, not yet come into force in Orissa, Punjab and West Bengal. Bills are under consideration in Andhra Pradesh and Mysore.

CO-OPERATIVE FARMING

The role of co-operative farming in the reconstruction of Indian rural economy was emphasised in the First and Second Plans. The goal indicated in the Second Plan was that such essential steps were to be taken as would provide sound foundations for the development of co-operative farming, so that over a period of ten years or so, a substantial proportion of agricultural lands was cultivated on co-operative lines. A comprehensive programme of development of co-operative farming during the Third Five Year Plan has been formulated on the basis of the recommendations of the Working Group on Co-operative Farming and decisions taken thereon by the National Development Council. It envisages organisation of 320 planned pilot projects at the rate of one per district in selected community development blocks where Panchayati Raj institutions and co-operatives have made progress. Each pilot project would consist of a minimum of ten co-operative farming societies demonstrating the advantages of co-operative farming and serving as catalytic agents for further expansion. Co-operative farming societies outside the pilot project areas would also be encouraged and assisted.

Till the end of 1963, 180 pilot projects were started and 1,200 co-operative farming societies organised, which had a membership of 24,000 and held an area of 1,51,000 acres; a Committee of Direction has been set up to assess the performance of the pilot projects. An additional 1,150 societies were organised outside the pilot project areas with a total membership of 22,800 and an area of 1,50,000 acres. One hundred and fifteen co-operative farming societies registered in the First and Second Plan periods were classified as joint and collective farming societies.

The National Co-operative Farming Advisory Board has been set up for planning and promoting the programme of co-operative farming. Advisory boards or special committees of the State co-operative councils have also been brought into being for the purpose. Twelve co-operative farming wings have been set up in selected extension training centres wherein 700 secretaries have been trained so far. These centres also organise orientation courses for extension staff, and assist in the organisation of village camps for present and prospective members of co-operative farming societies.

The Third Plan lays down that preference should be given to co-operative farming societies in the grant of lands reclaimed by Government and cultivable waste lands under the management of Government or village panchayats and in the settlement of lands acquired in consequence of the application of ceilings. The Dandakaranya Development Authority have taken

a decision to organise co-operative farming societies for the benefit of the displaced persons.

BHOODAN

The *Bhoodan* or voluntary land gift movement owes its inspiration to Acharya Vinoba Bhave. Describing the aims of the movement, Acharya Bhave says: "In a just and equitable order of society, land must belong to all. That is why we do not beg for gifts but demand a share to which the poor are rightly entitled. The main objective is to propagate the right thought by which social and economic maladjustments can be corrected without serious conflicts."

In its practical application, it takes the shape of asking for voluntary donations of one-sixth of the land from owners for redistribution among the landless. In the non-agricultural sector, the movement assumes various forms such as *Sampatidan* (donations of money or other resources), *Buddhidan* and *Jivandan* (dedication of one's mental abilities and life to the achievement of the *Bhoodan* ideals), *Sadhandan* and *Grihadan*.

The movement which began on a modest scale on April 18, 1951, now covers the length and breadth of India. The target is to obtain 5 crore acres of land so that it may be possible to provide some land for cultivation to every rural family. The movement has now widened out into *Gramdan*, i.e., donations of entire villages, the ideal being that all land should belong to the village community as a whole.

About 42 lakh acres were donated under *Bhoodan* till the end of September 1963. Over 10 lakh acres of this donation have been distributed. Up to November 1963, 6,412 villages had joined the *Gramdan* movement.

Several States have promoted legislation for facilitating transfers of land offered in *Bhoodan* and *Gramdan* and for the management of lands thus transferred. Bye-laws have been framed in some States for the management of *Gramdan* lands under the Co-operative Societies Act.

A conference was held at New Delhi on November 2-3, 1963, to review matters relating to development of *Gramdan* villages and *Bhoodan* lands. The meeting was attended by official representatives from State Governments and prominent workers in the field of *Gramdan* and *Bhoodan*.

CHAPTER XVIII

CO-OPERATIVE MOVEMENT

An integrated programme of co-operative development was drawn up for the Second Five Year Plan period. The co-operative movement* which was till then virtually restricted to the provision of credit, was extended so as to encompass other spheres of economic activity such as marketing, processing, warehousing, storage, etc. In November 1958, the National Development Council resolved that co-operatives should be organised on the basis of the village community as the primary unit and that responsibility and initiative for social and economic development at the village level should be placed fully on the village co-operative and the village panchayat. It also resolved that the co-operative movement should be developed so as to bring within its fold all rural families by the end of the Third Plan period. The targets suggested in the Third Five Year Plan as against the estimated achievements at the end of the Second Plan period are as follows :

TABLE 118
PLAN TARGETS AND ACHIEVEMENTS

	Achievements at the end of the Second Five Year Plan (estimated)	Targets for the Third Five Year Plan
Number of primary co-operative societies	2.1 lakhs	2.3 lakhs
Membership	1.7 crores	3.7 crores
Coverage of villages	—	100 per cent
Coverage of agricultural population	33 per cent	60 per cent
Loans to be issued through co-operatives:		
Short-term and medium-term	Rs. 203 crores	Rs. 530 crores
Long-term (outstanding)	Rs. 37 crores	Rs. 150 crores

Provision has also been made for starting 600 primary marketing societies and for constructing 9,200 rural godowns and 980 godowns at market centres. The Plan also provided for the setting up of an Agricultural Development Finance Corporation for augmenting the resources available for the issue of medium and long-term loans. In pursuance of this proposal, the Agricultural Refinance Corporation was set up on July 1, 1963, under an Act of Parliament, with an authorised capital of Rs. 25 crores, for granting medium and long-term credit by way of refinance or otherwise to eligible institutions and to subscribe to debentures floated by them, for the development of agriculture and the allied matters of animal husbandry, dairy farming, pisciculture and poultry farming. The eligible institutions are central land mortgage banks, state cooperative banks, scheduled banks and co-operative societies approved by the Reserve Bank. The loans and debentures should be repayable within a period not exceeding 25 years and should be guaranteed by the Government as to the repayment of principal and

*For a brief account of the genesis and growth of the co-operative movement till 1956, see Chapter XXII in 'INDIA 1962'. Also, for information on co-operative farming, see Chapter XVII on 'Land Reform.'

payment of interest. For the time being, long-term assistance is restricted to a maximum period of 15 years (20 years in exceptional cases). Assistance from the Corporation may be available for schemes such as (a) financing of reclamation and preparation of land, so that facilities for irrigation are fully utilised, (b) financing the development of special crops such as arecanut, coconut, cashewnut, cardamom, orchards, vineyards, etc., (c) development of mechanised farming, use of electricity through tube-wells, pump-sets, etc. Among other business that the Corporation may transact is the guaranteeing of deferred payments in connection with the import of capital goods by eligible institutions.

A Committee on Co-operative Credit, with V. L. Mehta as Chairman, was appointed in 1959 to consider different aspects of the questions of expanding agricultural credit, including standards for credit limits, loan policies and practices of co-operative credit institutions, measures necessary for increasing the borrowing power of primary credit societies and the desirability of share capital participation by the State in the village societies. The report of the Committee was submitted to the Government of India in May 1960 and was considered by the State Ministers for Co-operation in June 1960. The Government of India have since indicated certain new lines of co-operative policy to State Governments, the more important of which are given below :

- (i) In organising village societies the aim should be to ensure viability with the inclusion of the smallest number of villages necessary, so that the co-operative society achieves both viability and the essential characteristics of co-operation, namely, voluntary basis, close contact, social cohesion and mutual obligation.
- (ii) The State may participate in the share capital of viable primary agricultural credit societies on a matching basis, such participation ordinarily being limited to Rs. 5,000 and up to a maximum of Rs. 10,000 in exceptional cases.

A Working Group on Panchayats and Co-operatives, appointed in 1961, recommended, *inter alia*, that (i) the panchayats should have an important role in the movement and should disseminate information, help in increasing membership, deposits and share capital and should enlist the support of every family in their area; (ii) even though the panchayats should have the overall responsibility for planning, functions of co-operatives to be carried out on business principles should be handled by the co-operatives while as a rule functions involving a heavy element of subsidy or schemes which are not self-financing immediately should be handled by the panchayats; (iii) functions calling for community effort of the entire village should fall within the area of the panchayats; (iv) where co-operatives are not yet strong and broad-based, some of the functions of the co-operatives could be discharged, as an interim measure, by the panchayats, and (v) the Zila Parishad/ Panchayat Samiti will exercise general supervision, as distinct from technical, to the extent necessary.

In pursuance of a recommendation made at the Conference of State Ministers of Co-operation held in Lucknow in February 1963, the Government of India appointed a committee on Co-operative Administration, under the Chairmanship of V. L. Mehta, which submitted its report in November 1963. The committee studied the co-operative departmental set-up in the various States and suggested measures necessary to strengthen co-operative administration in the country. The committee also studied the question of "Cadres" for the increasing number of co-operative institutions that are coming up in different sectors of the economy.

The salient features of the movement and the main operations of the societies in 1951-52 and 1961-62 are indicated in the table below.

TABLE 119
NUMBER, MEMBERSHIP AND WORKING CAPITAL OF
CO-OPERATIVE SOCIETIES

	1951-52	1961-62
Number of societies	1,85,630	3,41,841
Membership of primary societies	1,37,91,687	3,78,35,619
Working capital* (in lakhs of rupees)	3,06.34	1,534.78
(a) Share capital	49.80	259.69
(b) Reserve & other funds	43.51	109.10
(c) Loans from		
(i) Central financing agencies	49.77	476.78
(ii) Reserve Bank	6.85	131.72
(iii) Government	14.12	69.06
(iv) Other sources	9.73	107.40
(d) Deposits from		
(i) Central societies	4.76	38.06
(ii) Primary societies	15.86	67.37
(iii) Individuals & other sources	96.44	223.87
(e) Deposits held by marketing societies	—	3.99
(f) Debentures of land mortgage banks	7.91	47.74

Taking the average size of an Indian family as five, it may be estimated that by the end of June 1962 roughly 18.92 crores or about 42 per cent of the population was served by the co-operative movement, allowance being made for individuals being members of more than one society.

The results of the operations of the different types of co-operative societies during 1951-52 and 1961-62 are shown in the following table.

TABLE 120
PROFITS EARNED BY CO-OPERATIVE SOCIETIES

	(in lakhs of rupees)	
Type of society	1951-52	1961-62
State & central banks	81.60	6,17.42
Land mortgage banks	6.86	42.51
Primary agricultural credit societies	91.67	4,37.90
Grain banks	15.13	24.22
Primary non-agricultural credit societies	1,12.89	2,89.40
State and central non-credit societies	1,26.38	4,57.00
Primary non-credit societies	95.43	

CREDIT SOCIETIES

The earliest co-operative societies formed in India were credit societies, which even today constitute the most important class of societies, both in number and membership. The credit societies have a three-tier structure consisting of the state co-operative banks at the State level, central co-operative banks at the district level and primary agricultural credit societies at the village level. In some States, grain banks give loans in kind to agriculturists. Long-term credit for agricultural purposes is provided by central and primary land mortgage banks while the banking and credit needs of urban people are met by urban banks and employees' credit societies.

State Co-operative Banks

The number of state co-operative banks, their membership and financial transactions during 1951-52 and 1961-62 are given below.

*Excludes figures relating to general insurance societies.

TABLE 121
STATE CO-OPERATIVE BANKS

	1951-52	1961-62
Number	16	21
Membership	23,272	30,468
	<i>(in lakhs of rupees)</i>	
Share capital	1.90	21.26
Reserve and other funds	2.36	7.59
Deposits	21.18	81.44
Other borrowings	11.27	145.79
Working capital	36.72	256.09
Cash in hand and with banks	2.81	20.05
Investments :		
Government and other trustee securities	10.52	26.18
Others	78	17.53
Loans advanced	55.27	256.29
Loans outstanding	20.01	196.51
Loans overdue	3.22	8.10

Central Co-operative Banks

The principal function of central co-operative banks is to act as the balancing centre of their affiliated societies and to provide finance to the primary societies. The following table gives details relating to central co-operative banks.

TABLE 122
CENTRAL CO-OPERATIVE BANKS

	1951-52	1961-62
Number	509	387
Membership	2,31,319	3,95,600
Loans advanced (Rs. lakhs)	105.64	384.40
Working capital (Rs. lakhs)	60.11	352.65

Their share capital and reserves amounted to Rs. 4.62 crores and Rs. 5.18 crores in 1951-52 and Rs. 47.66 crores and Rs. 14.14 crores in 1961-62. The composition of their working capital is shown below.

TABLE 123
COMPOSITION OF WORKING CAPITAL OF CENTRAL
CO-OPERATIVE BANKS

	Percentage of working capital	
	1951-52	1961-62
Owned funds	16.3	17.5
Deposits	63.6	35.3
Other borrowings	20.1	47.2

Loans outstanding at the end of June 1962 against individuals and against banks and societies, totalled Rs. 3.48 crores and Rs. 255.47 crores respectively. The percentage of overdues to outstandings was 15.8. The total investments of central co-operative banks amounted to Rs. 52.64 crores at the end of 1961-62, of which Rs. 24.69 crores represented investments in Government and other trustee securities.

Agricultural Credit Societies

At the end of June 1962, there were 2,15,081 agricultural credit societies with a membership of 1,95,72,000. The working capital of these societies stood at Rs. 325.33 crores. During 1961-62, the societies advanced loans amounting to Rs. 228.31 crores. Loans outstanding at the end of June

1962 amounted to Rs. 256.67 crores and the overdues stood at Rs. 62.93 crores. Loans from central financing agencies and Government amounted to Rs. 214.26 crores while owned funds and deposits stood at Rs. 88.62 crores and Rs. 17.64 crores respectively. An analysis of the working capital reveals that the ratio of deposits to working capital was only 5.4 per cent. The following table shows the average membership, share capital, deposits and working capital of agricultural credit societies.

TABLE 124
AVERAGE MEMBERSHIP, SHARE CAPITAL, DEPOSITS AND
WORKING CAPITAL OF AGRICULTURAL CREDIT SOCIETIES

	1951-52	1961-62
Membership per society	44 (in rupees)	91
Share capital per society	827	3,190
Share capital per member	19	35
Deposits per society	408	820
Deposits per member	9	9
Working capital per society	4,190	15,126

Grain Banks

At the end of June 1962, there were 9,190 grain banks with a membership of 12.32 lakhs and a working capital of Rs. 6.08 crores. Andhra Pradesh, Maharashtra, Mysore and Orissa accounted for 95.5 per cent of the total number of grain banks. The loans advanced by them during 1961-62 amounted to Rs. 2,54.49 lakhs.

Central Land Mortgage Banks

The central land mortgage banks, which are the pivot of the structure of long-term finance to agriculturists through the primary land mortgage banks, raise their funds mainly by the issue of debentures. The debentures are guaranteed by the State Governments in respect of the repayment of principal and the payment of interest. Out of 17 banks, 10 banks floated debentures of the value of Rs. 12.18 crores during 1961-62. The Reserve Bank of India contributed Rs. 1.31 crores to the debentures issued during the year. Debentures of the value of Rs. 47.74 crores were in circulation at the close of 1961-62. The table below indicates the progress made by central land mortgage banks between 1951-52 and 1961-62.

TABLE 125
CENTRAL LAND MORTGAGE BANKS

	1951-52	1961-62
Number	6	17
Membership	34,579 (in lakhs of rupees)	2,99,383
Share capital	44	5,73
Reserve fund	25	74
Other funds	12	56
Debentures	7.83	47.74
Borrowings	1.53	5.46
Working capital	10.17	61.70
Sinking fund investments	1.27	10.92
Investments including cash and bank balances	77	3.62
Loans advanced	2.51	14.75
Loans recovered	44	3.93
Loans due	8.05	47.90

Primary Land Mortgage Banks

Of the 536 primary land mortgage banks in the country at the end of 1961-62, as many as 348 or 64.9 per cent were concentrated in Andhra Pradesh, Madras and Mysore. The membership stood at 8,52,293 and working capital at Rs. 38.31 crores. Loans advanced by the banks amounted to Rs. 12.59 crores. The table below indicates the progress made by primary land mortgage banks between 1951-52 and 1961-62.

TABLE 126
PRIMARY LAND MORTGAGE BANKS

(in lakhs of rupees)

	1951-52	1961-62
Share capital	58	2,83
Reserve fund	13	39
Other funds	5	23
Debentures and other borrowings	6,84	34,87
Working capital	7,60	38,31
Loans advanced	1,30	12,59
Loans repaid	48	2,19
Loans due	6,96	35,28

Non-agricultural Credit Societies

The non-agricultural credit societies include, among others, urban banks and employees' credit societies. At the end of June 1962, there were 12,477 societies with a membership of 49.69 lakhs. Deposits, which stood at Rs. 102.67 crores at the end of 1961-62 accounted for 62 per cent of the working capital. Some of these societies also did non-credit business. Goods worth Rs. 3.22 crores were received while sales amounted to Rs. 4.22 crores. The table below indicates the progress made by the societies during the period from 1951-52 to 1961-62.

TABLE 127
OPERATIONS OF NON-AGRICULTURAL CREDIT SOCIETIES

(in lakhs of rupees)

	1951-52	1961-62
Share capital	13,36	36,98
Reserve fund	3,78	8,47
Cash in hand and with banks	5,65	12,08
Investments in:		
Land and buildings	73	1,95
Trustee securities	6,67	14,28
Others	4,68	13,75
Loans advanced	50,97	161,63
Loans recovered	47,01	148,73
Loans due	44,36	129,89
Loans overdue	4,16	8,16

NON-CREDIT SOCIETIES

The number, membership and working capital of different types of non-credit societies as at the end of June 1962 are given in the following table. Comparative data for 1951-52 are not available as the detailed classification of the societies was adopted for the first time in 1957-58.

TABLE 128
NUMBER, MEMBERSHIP AND WORKING CAPITAL OF
NON-CREDIT SOCIETIES

Type of society	Number	Member- ship	Working capital (Rs. lakhs)
Marketing societies			
State	21	5,145	10,97.32
Central	151	86,645	11,61.98
Primary	3,007	16,49,449	32,27.16
Sugarcane supply societies:			
State	1	124	47.99
Central	69	8,811	99.51
Primary	9,124	25,32,244	9,00.88
Milk unions	99	17,516	3,47.29
Milk supply societies	3,945	3,13,548	2,33.54
Farming societies	3,577	97,339	5,06.71
Irrigation societies	1,469	55,211	2,24.46
Sugar factories	67	2,00,816	78,37.18
Cotton ginning and pressing societies	131	72,053	4,32.25
Other processing societies	5,613	2,57,063	4,85.42
Weavers' societies:			
State	19	8,627	7,59.36
Central	120	8,431	1,44.42
Primary	12,222	12,19,983	22,05.07
Spinning mills	25	11,689	6,26.17
Other industrial societies	22,464	11,37,430	19,31.27
Consumers' societies:			
Wholesale	32	4,642	28.18
Primary	7,266	13,95,334	9,81.93
Housing societies:			
State	6	2,079	7,46.56
Primary	7,877	4,54,573	64,33.77
Fishermen's societies	2,538	2,67,854	2,16.03
Insurance societies	6	9,636	67.92
Other non-credit societies	21,717	15,36,749	22,91.69

OTHER SOCIETIES

Supervising Unions

In 1961-62, there were 1,079 supervising unions with 56,980 affiliated societies. These unions attended to the supervision of credit societies in Andhra Pradesh, Gujarat, Kerala, Madras, Maharashtra and Mysore and supervised special types of societies like housing, farming, purchase, sale, etc., in the other States.

Co-operative Unions and Institutes

There were 20 state co-operative unions and institutes and 197 district unions and institutes on March 31, 1962. The number of societies affiliated to them was 46,024 and 41,774 respectively. These unions and institutes imparted training to 7,66,980 members, 62,227 honorary office-bearers and 24,765 paid staff of co-operative societies. The total income of the state unions was Rs. 1,36.91 lakhs including government grants amounting to Rs. 1,06.80 lakhs, the total income of district unions and institutes amounted to Rs. 21.15 lakhs of which Rs. 6.19 lakhs were government grants.

Societies under Liquidation

At the beginning of 1961-62 there were 18,855 co-operative societies under liquidation. The value of the assets realised and liabilities paid off during 1961-62 amounted to Rs. 55.81 lakhs and Rs. 70.36 lakhs respectively.

CHAPTER XIX

IRRIGATION AND POWER

IRRIGATION

India's water resources have been provisionally estimated at 135,60 lakh acre-feet, of which approximately 45,00 lakh acre-feet are believed to be utilisable for irrigation. Up to 1951, about 7,60 lakh acre-feet *i.e.* about 17 per cent of the usable flow or 5.6 per cent of the total annual flow, had been utilised. By the end of the Second Plan about 12 lakh acre-feet representing about 27 per cent of the usable flow or 8.9 per cent of the total annual flow was estimated to have been utilised. An additional 4,00 lakh acre-feet are likely to be used in the Third Plan, bringing the proportion to about 36 per cent of the usable flow.

The possibilities of diverting the normal flow of rivers into irrigation canals have been almost exhausted. The plans for the future development of irrigation, therefore, increasingly aim at impounding by dams the surplus river-flow during the monsoon for use in dry weather. In areas unsuitable for flow-irrigation, the construction of minor irrigation works, such as tanks and wells, and the installation of water-lifting devices have been planned.

The Central Board of Irrigation and Power, constituted in 1927, is responsible for the initiation of fundamental research in the country in the field of irrigation and power and the co-ordination of the work of 21 research stations established in different parts of the country.

The Central Water and Power Commission is charged with the responsibility of initiating, co-ordinating and furthering, in consultation with the State Governments concerned, schemes for the control, conservation and utilisation of water resources throughout the country for the purpose of flood control, irrigation, navigation and hydro-power generation. It is also responsible for schemes of thermal power development and of transmission and utilisation of electrical energy throughout the country.

A Technical Committee constituted by the Planning Commission, on which CW&PC is represented, is charged with the assessment of water resources and their utilisation. The CW&PC in collaboration with the Ganga Basin Organisation, has undertaken the assessment of surface water resources and their utilisation for major and medium river valley schemes and the co-ordination of the data collected by the Ministries of Food and Agriculture, Health and Transport pertaining respectively to minor irrigation works and domestic and navigational purposes. The ultimate aim is to draw up a balance sheet of water to be utilised for additional benefits in the country.

RIVER VALLEY PROJECTS*

Particulars of the principal irrigation works in the country and the principal irrigation schemes included in the Third Plan are given at the end of this chapter in Tables 137 and 138. The major river valley projects are described briefly in the following paragraphs.

Gandak Project

An international agreement on the Gandak Irrigation and Power Project was signed between the Government of Nepal and the Government of India on December 4, 1959. It is an inter-State project in which Bihar

*Description of only selected projects is given.

and Uttar Pradesh are the participating States and Nepal would also derive irrigation and power benefits from it.

The project comprises the following components :

- (i) A 2,437-ft. long barrage with road bridge across the river Gandak at Bhaissalotan in Bihar.
- (ii) Main western canal to irrigate 14.08 lakh acres in the Saran district of Bihar, and about 8.31 lakh acres in the Gorakhpur and Deoria districts of Uttar Pradesh. A separate canal will also take off from the western bank to irrigate 40,400 acres in the Bhairwa district of western Nepal.
- (iii) Main eastern canal to irrigate 17.54 lakh acres in the Champaran, Muzaffarpur and Darbhanga districts of Bihar, and 1.04 lakh acres in Parsa, Bara and Rautahat districts of Nepal.
- (iv) A power house with an installed capacity of 15,000 kw at a suitable place on the main western canal in Nepal territory, which will be subsequently handed over to Nepal as a gift.

The construction of the barrage and excavation of some of the canals has started.

The project which is estimated to cost Rs. 52 crores will improve communications and provide additional employment opportunities and better trade facilities to the people of Nepal and India.

Kosi Project

The three-unit Kosi scheme, estimated to cost Rs. 54.50 crores, consists of :

Unit I—A barrage near Hanumannagar in Nepal and appurtenant works.

Unit II—About 150 miles long flood embankments on either side of the Kosi river, and

Unit III—the eastern Kosi canal system.

The barrage and headworks including the road bridge have been completed. Flood embankments affording protection to nearly 800 sq. miles in Nepal and India were completed in 1959. Work on the canal system is in progress and is expected to be completed in 1965-66. On completion, an area of 14.05 lakh acres will be irrigated in the districts of Purnea and Saharsa in Bihar.

In addition to the above components, the following schemes have been sanctioned as Stage II of the project :

- (i) *Kosi power house* : It is proposed to construct a power station with an installed capacity of 20,000 kw comprising four generating units of 5,000 kw each, on the eastern Kosi canal at an estimated cost of Rs. 2.78 crores. Half of the power generated at the power house will be supplied to Nepal and the other half will be available for use in Bihar.
- (ii) *Western Kosi canal* : This scheme, estimated to cost Rs. 13.49 crores, comprises the construction of a main canal, 70 miles long, taking off from the right flank of the Kosi barrage to irrigate 8.04 lakh acres in Darbhanga district of Bihar, and 30,000 acres in Nepal.
- (iii) *Extension of eastern Kosi canal* : This scheme, estimated to cost Rs. 4.67 crores, comprises the construction of a canal system taking off from the eastern Kosi main canal to irrigate an area of 3.97 lakh acres in Saharsa district.

Kakrapara Project

This project may be regarded as the first phase of the development of the Tapi valley. The weir, 2,038 ft. long and 45 ft. high, on the rocky river bed near Kakrapara, 50 miles upstream of Surat, was completed in

June 1953. Ninety-one per cent of earth work of canals and 83 per cent on distributaries have been completed. The project will irrigate 5.62 lakh acres in Surat district.

Tawa Multipurpose Project

The Tawa multipurpose project, estimated to cost Rs. 27.10 crores, envisages the construction of a reservoir across the Tawa river (a tributary of the Narmada river) about half a mile downstream of its confluence with its tributary Denwa in Hoshangabad district of Madhya Pradesh.

The 5,815 ft. long dam will be partly masonry and partly earthen with about 1,500 ft. long dykes on the flanks. Two canals, together 130 miles in length, will take off from the right and left flanks and will provide irrigation facilities to a total area of 7.80 lakh acres annually. Two power houses will be constructed which will have an installed capacity of 42,000 kw.

Bhadra Reservoir Project

This multi-purpose project, estimated to cost Rs. 31.93 crores (irrigation) across the river Bhadra in Mysore State, will irrigate 2.45 lakh acres of land in Shimoga, Chikmagalur, Chitradurga and Bellary districts. It has two power stations with a total installed capacity of 33,200 kw.

Upper Krishna Project, Stage I

Phase I of the Upper Krishna project across Krishna river in Mysore will consist of a masonry dam for spillway and an earthen dam for flanks at Narayanpur, Gulbarga district. The dam will be 34,200 ft. long and 146.50 ft. high above the lowest foundation level. The right bank canal and the left bank canal taking off from the reservoir will irrigate a total area of 3.2 lakh acres in Raichur district on the right bank and 2.8 lakhs acres in Gulbarga district on the left bank. It is also proposed to generate 10,500 kw and 13,900 kw (installed capacity) of electricity on the left and right flanks of the dam respectively. The estimated cost of the project is Rs. 58.2 crores.

Malaprabha Project

The Malaprabha project envisages the construction of a 145 ft. high masonry dam across the Malaprabha river, a tributary of Krishna, in Belgaum district of Mysore State. The right bank canal of the project will irrigate 3 lakh acres in Dharwar, Belgaum and Bijapur districts.

The project is estimated to cost Rs. 20 crores.

Nagarjunasagar Project

The Nagarjunasagar project, which is a scheme of the Andhra Pradesh Government, comprises the construction of a masonry dam on the Krishna river near Nandikonda village, about 100 miles from Hyderabad, and two canals one on each side of the river. The right bank canal, 127 miles long, and the left bank canal, 111 miles long, will together irrigate an area of 20 lakh acres including stabilisation of irrigation in Krishna delta. The reservoir will have a storage capacity of 54.4 lakh acre-feet and its water spread will be 73.66 sq. miles. The dam and the canal are expected to be completed in 1968-69. The dam will be provided with eight pen-stocks of 14 ft. diameter for the generation of power in the final stage of the project.

The project is estimated to cost Rs. 139.53 crores.

Tungabhadra Project

This joint undertaking of the Governments of Andhra Pradesh and Mysore comprises a 5,712 ft. long and 162 ft. high dam on the Tungabhadra river at Mallapuram; a 127-mile long canal (called the left bank canal) with a power house on the left side; a 217-mile long canal (called

the low level canal) with two power houses, and a 122-mile long canal (called the high level canal) on the right side.

The dam was inaugurated in July 1953. The reservoir has a water-spread of 146 square miles. The two canals on either side will irrigate nearly 8.3 lakh acres in Andhra Pradesh and Mysore. There will be two power stations on the right side, one below the dam and the other at the tail-end of a 14-mile long hydel channel at Hampi. Two generating units of 9,000 kw each in the dam power house and two units of the same capacity out of three units in the canal power house have been commissioned. Two additional units of 9 mw each at each of the two power houses are under installation. A power station will also be constructed below the dam on the left side where three generators of 9,000 kw each have been installed in the first instance and another unit of 9,000 kw will be added in 1964. The low level canal, including the hydel channel and its major distributaries, have been completed while work on the construction of the high level canal is in progress. An area of about 1.23 lakh acres in Andhra Pradesh and 2.60 lakh acres in Mysore has been brought under irrigation.

Hirakud Dam Project

The 15,748 ft. long main Hirakud dam is the world's longest dam. Flanked on both sides by 13 miles of dykes, it impounds 66 lakh acre-feet of Mahanadi water. The project is divided into two stages. Stage I of the project has been completed in all respects providing perennial irrigation for 3.8 lakh acres in the two districts of Sambalpur and Bolangir in Orissa. The total installed capacity of the power house at Hirakud is 1,23,000 kw. Power is being supplied to various industrial and metallurgical plants at Hirakud, Rajgangpur, Rourkela, Joda, Brajrajnagar and other places in Orissa besides several towns, including Puri, Sambalpur, Hirakud, Sundergarh, Bargarh and Cuttack. An expenditure of Rs. 65.54 crores was incurred on stage I of the project up to September 1963.

The Mahanadi Delta irrigation scheme is being executed by the Government of Orissa as an adjunct to stage I of the Hirakud dam project at an estimated cost of Rs. 26.74 crores. It consists of a diversion weir at Mahanadi to pick up the regulated release from Hirakud and remodelling of the existing canal system and weirs on the Mahanadi and Birupa rivers. On completion, it will irrigate a gross area of 16.08 lakh acres (including the existing area of 2 lakh acres) in Cuttack and Puri districts. By the end of 1962-63, additional kharif area of 48,887 acres and rabi area of 93,213 acres were irrigated by remodelling the existing canals and distributaries. The project is likely to be completed by 1969-70.

Estimated to cost Rs. 14.92 crores, stage II of the project comprises the Chiplima power house with three generating units of 24,000 kw each, expansion of the power house at Hirakud by two generating units of 37,500 kw each and a connecting power channel between the two power houses. The fifth and sixth units in the power house at Hirakud were commissioned in April 1962 and August 1963 respectively. Two units at the Chiplima power house were commissioned in July and November, 1962 respectively and the third in September, 1963. With the commissioning of these units, stage II of the project has been completed bringing the installed capacity at the Hirakud power house to 1,98,000 kw, at Chiplima power house to 72,000 kw, and the overall total of the Hirakud dam project to 2,70,000 kw.

Bhakra Nangal Project

A joint venture of Punjab and Rajasthan, the Bhakra Nangal Project is the biggest multi-purpose river valley scheme and is estimated to cost Rs. 175.31 crores. It consists of a 740 ft. high dam across the Sutlej at Bhakra; 90 ft. high Nangal dam; 40-mile long Nangal hydel channel; one

power house on the left bank of Bhakra dam; two power houses on the hydel channel at Ganguwal and Kotla and about 652 miles of canals and over 2,200 miles of distributaries. Started in 1946, the project has been practically completed. The project was dedicated to the nation by the Prime Minister on October 22, 1963.

The Bhakra canal system commands a gross area of about 67.6 lakh acres, of which the cultivable commanded area is 58.6 lakh acres. On full development an area of 36 lakh acres is expected to be annually irrigated. In addition, about 37 lakh acres will get increased water supply. An area of 23.54 lakh acres in Punjab and Rajasthan received irrigation during 1962-63.

The three power houses at Bhakra, Ganguwal and Kotla have a combined installed capacity of 6,04,000 kw and a total firm capacity of 337 mw.

It is proposed to construct another power house on the right bank of the Sutlej. Estimated to cost about Rs. 26 crores it will have five generating units of 120 mw each. The power house is expected to be commissioned in 1966.

Beas Project

This project, which is a joint venture of the Governments of Punjab and Rajasthan, consists of two units viz., (i) Beas-Sutlej link, and (ii) Beas dam at Pong. The former provides for a diversion dam at Pandoh, a combination of tunnels and an open hydel channel, and a power plant with an installed capacity of 636 mw. The firm power capacity of this unit will be 391 mw at 100 per cent load factor including 120 mw of the additional unit to be installed at Bhakra. It will also provide irrigation to a culturable commanded area of 13 lakh acres, the annual irrigation being of the order of 8 lakh acres.

A project report prepared in May 1959, for the second unit, is under revision in the light of the latest hydrological studies. Primarily intended for storing water for the Rajasthan canal, the project will ensure extension of perennial irrigation to about 50 lakh acres in Punjab and Rajasthan. The 350-ft. earth-cum-rock fill dam will have a storage capacity of 55.5 lakh acre-feet.

Rajasthan Canal Project

The Rajasthan canal project estimated to cost Rs. 184.09 crores was sanctioned in July 1957. It envisages the construction of a canal taking off from the Harike barrage across the river Sutlej and has been divided into two parts :

(a) Rajasthan Feeder : 134 miles long, of which the first 111 miles lie in Punjab.

(b) Rajasthan Canal : 292 miles long, lying entirely in Rajasthan.

To begin with, the Rajasthan canal will be fed by flow supplies from the Ravi and the Beas rivers. Later, the flow supplies will be supplemented by stored waters from dams proposed to be constructed on these two rivers. The flow supplies will provide irrigation to about 16.84 lakh acres in the districts of Bikaner, Jaipur and Sriganganagar.

The project report, which is being revised in the light of further surveys and investigations, provides for annual (perennial) irrigation of 28.75 lakh acres out of the total culturable commanded area of 36.86 lakh acres.

The project is now proposed to be executed in two stages. The first stage, comprising the Rajasthan feeder and the first 122 miles of the Rajasthan canal, including take-off channels, is expected to be completed in 1969-70. The second stage envisages the completion of the remaining length together with the distribution system below Naushera branch and is

expected to be completed in 1977-78. The Suratgarh branch and Rawatsar distributary have been completed.

It is proposed to line the entire length of the canal and the feeder to save water losses through seepage.

Chambal Project

The first phase of the project, which is being jointly executed by the Madhya Pradesh and Rajasthan Governments, consists of the Gandhi Sagar dam, Gandhi Sagar power station, transmission lines, Kotah barrage and canals on either side of the barrage. The reservoir to be formed by the Gandhi Sagar dam will have a gross storage capacity of 68.5 lakh acre-feet of water. The canal system will irrigate 11 lakh acres in Rajasthan and Madhya Pradesh. Besides, 80,000 kw of power will be generated from the five generating sets at the Gandhi Sagar power station. The Gandhi Sagar dam and power station with four units have been completed and power generation was started from November 19, 1960. The Kotah barrage has also been completed and water for irrigation was released on November 20, 1960. Work has commenced on the second stage of the project which envisages the construction of the Rana Pratap Sagar dam and a power house below it. When completed, it will provide irrigation facilities to 3 lakh acres and generate 90,000 kw of power at 60 per cent load factor. Work has also been undertaken on the third stage of the project which comprises the construction of Kotah dam and a power station at its toe, which will have three units of 33,000 kw each with provision for the installation of a fourth one. On completion, it will produce 60,000 kw of power at 60 per cent load factor.

Ramganga River Project

The river Ramganga, one of the major tributaries of the Ganga is being harnessed by constructing a 412-ft. high earth and rock fill dam, two miles upstream of Kalagarh in district Garhwal and a 220-ft. high saddle dam. Power will be generated at the saddle dam. The project will irrigate an area of 17.06 lakh acres and would also firm up 113 mw of power in the Ganga-Sarda Yamuna grid.

The scheme is estimated to cost Rs. 67.98 crores, of which Rs. 38.53 crores is for irrigation, Rs. 19.70 crores for power and Rs. 9.75 crores for flood control. The scheme is likely to be completed in the Fourth Plan.

Mayurakshi Project

This project of the West Bengal Government is mainly an irrigation scheme though it also provides for the installation of a 4,000 kw hydro-electric plant. Power from the project will be supplied to the Birbhum and Murshidabad districts in West Bengal and Santhal Parganas in Bihar. The first stage of the project was completed in 1951 with the construction of a diversion barrage at Tilpara near Suri, 20 miles below the dam in West Bengal. The 155 ft. high and 2,170 ft. long Massanjore dam, now named Canada dam, was completed in June 1955. The canals will irrigate 6.5 lakh acres annually. The Canada dam will have a capacity of 5 lakh acre-feet of water and will provide rabi irrigation for nearly 50,000 acres. The first 2,000 kw generating set was commissioned in December 1956 and the second in February, 1957.

Project for the Preservation of the Port of Calcutta

The alarming deterioration of the Hooghly and the consequent threat of the extinction of the port of Calcutta have reached a stage which requires immediate remedial measures.

The problem of the Calcutta port has been engaging the attention of experts for over a century. The only technical solution of the problem is

to restore the upland supply by the construction of a barrage on the Ganga. The Ganga barrage project envisages the following principal components:

- (i) a barrage across the Ganga at Farakka;
- (ii) a barrage across the Bhagirathi at Jangipur above the outfall of the canal;
- (iii) a feeder canal, 26½ miles long, taking off from upstream of the Ganga barrage on the right bank and outfalling into the Bhagirathi, downstream of the Jangipur barrage.

By a judicious operation of these components, it will be possible not only to prolong the upland supplies into the Hooghly but also to even out the sharply-fluctuating hydrographs in the river, thus counteracting the deteriorating effects of the preponderance of tidal flow.

While the principal objective of the project is the preservation of the Bhagirathi-Hooghly and the port of Calcutta, a number of incidental benefits will also accrue, namely, improvement of the city water supply and the drainage of the region, improvements in communications, inland navigation, etc.

Damodar Valley Corporation Project

The project comprises four storage dams at Tilaiya, Konar, Maithon and Panchet Hill with hydel power houses of a total capacity of 1,04 lakh kw attached to all the dams except Konar; three thermal power stations at Bokaro, Durgapur and Chandrapura with a total capacity of 6.25 lakh kw; an extensive power transmission grid and an irrigation barrage at Durgapur with canals and distributaries. During the Third Plan, two units of 1.25 lakh kw each are to be added to the DVC system raising the total power generating capacity to 9.79 lakh kw.

The all-concrete Tilaiya dam on the river Barakar, with earthen extensions on either side, was completed in 1953. The Konar dam was completed in September 1955. The Maithon dam on the river Barakar stores 11.04 lakh acre-feet of water, and the underground hydro-electric station near the dam has a capacity of 60,000 kw. The dam was completed in September 1957.

Designed primarily for flood control, the Panchet Hill dam, completed in December 1959, will impound 12.14 lakh acre-feet of water. A 40,000 kw hydro-electric station built near the dam was commissioned in September 1959.

The 2,271 ft. long and 38 ft. high barrage at Durgapur in West Bengal was opened in August 1955. It will irrigate, on full development, over 9.73 lakh acres of land. The operation and maintenance of the barrage and irrigation system was transferred to the Government of West Bengal from December 2, 1963. Nearly 85 miles of the main left bank canal have been made navigable, providing an alternative means of communication between Calcutta and the coalfields of Raniganj.

The Bokaro thermal power station with an installed capacity of 1.50 lakh kw was commissioned in February 1953. An additional unit of 75,000 kw has since been added to this station. At Durgapur two 75,000 kw units have been commissioned. Work on two units of 125 mw each at Chandrapura is in progress. It is proposed to instal one more unit of 125 mw each at Durgapur and Chandrapura.

The National Projects Construction Corporation Ltd.

The National Projects Construction Corporation Ltd., which was incorporated under the Companies Act in January 1957, with a nominal capital of Rs. 2 crores, has at present a paid-up capital of Rs. 1.33 crores, contributed by the Central Government and the State Governments of Madhya Pradesh, Rajasthan, Bihar, Kerala, Jammu and Kashmir, Punjab, Assam, Gujarat and Uttar Pradesh.

and medium irrigation schemes. The total utilisation in the Third Plan period is expected to be 100 lakh acres.

The new projects to be commenced during the Third Plan include (i) about 100 new medium irrigation schemes which will be of value both for agricultural purposes and regional development; (ii) storage schemes on the Beas in Punjab undertaken as a result of the conclusion of the Indus Waters Treaty, 1960; and (iii) schemes representing the irrigation component of multipurpose projects taken up primarily for power development and those necessitated by irrigation projects in neighbouring States. The cost of the irrigation and flood control programmes during the Third Plan is Rs. 661 crores—Rs. 436 crores for irrigation projects carried over from the Second Plan. Rs. 164 crores for new projects and Rs. 61 crores for flood control, drainage, anti-waterlogging and anti-erosion schemes.

INLAND NAVIGATION

Some of the multi-purpose schemes completed or under construction include inland navigation as one of the objectives. The recently completed 85-mile long left bank main canal of the Damodar Valley project, from Durgapur to Tribeni, has been designed as irrigation-cum-navigation canal. It links the lower Raniganj coalfields with Calcutta via the Hooghly. Its utilisation for transport of coal is being considered. The condition of the Mahanadi river from Dholpur to Cuttack (a distance of 106 miles) has been considerably improved as a result of regular discharges from the Hirakud dam reservoir. Recent surveys reveal that it may be possible to introduce navigation of this river by shallow-draft power crafts with proper conservancy works. The left bank low level canal of the Tungabhadra project on the Mysore side is also designed to serve the needs of navigation.

POWER

The progress of power production was very slow up to the mid-twenties; the aggregate installed capacity in 1925 was only 1,62,341 kw; by 1945, the installed capacity had increased more than five-fold to 9,00,402 kw. The installed capacity of power plants in the public utilities in March 1962 was 50,16,883 kw—an increase of nearly 174 per cent since 1951. During the same period, the generation of electricity increased from 5,36.19 lakh kwh to 19,66.99 lakh kwh showing an increase of nearly 236 per cent. The growth in steam, diesel and hydro plant capacity during the period was 125, 103 and 289 per cent respectively. The progress of electricity supply in India during 1939—1963 and during March 1961 to 1963 in terms of index numbers is shown in Tables 131 and 132.

TABLE 131
PROGRESS OF ELECTRICITY SUPPLY

	Installed capacity of generating plants ('000 kw)				Aggregate of Max. demand during the year ('000 k.w.)	Energy generated (crore kwh.)	Energy sold (crore kwh)	Average load factor* (per cent)	Average demand** (per cent)
	Steam	Diesel	Hydro	Total					
1939	5.41	87	4.42	10.70	5.76	244	203	48.4	53.8
1947	7.57	98	5.08	13.63	8.83	407	336	52.7	64.8
1951	10.97	1.63	5.75	18.35	12.05	586	479	55.5	65.7
1956	15.96	2.28	10.62	28.86	19.90	966	796	55.4	68.9
1960-61	24.36	3.00	18.43	45.79	35.51	16.94	1,395	54.3	77.6
1961-62	24.66	3.17	24.19	52.02	39.71	19.68	1,645	56.4	79.1
1962-63	25.36	3.27	29.16	57.79	46.35	22.36	1,868	55.1	80.2

*Based on Cols. 6 and 7.

**Based on Cols. 5 and 6.

TABLE 132
INDEX NUMBERS OF ELECTRICITY SUPPLY—(1951=100)

	March 1961	March 1962	March 1963
<i>Installed generating capacity</i>			
Steam plant	222.0	224.5	231.1
Oil plant	184.5	202.6	201.0
Hydro plant	333.2	420.3	506.5
Index of total generating capacity	253.3	283.4	314.8
<i>Generation of electricity</i>			
Steam plant	313.9	341.6	366.2
Oil plant	167.0	171.2	175.0
Hydro plant	271.5	342.3	412.8
Index of total generation	287.7	335.5	381.8
Coal consumption	270.3	292.0	322.6
Fuel oil consumption	153.1	161.6	163.3
<i>Sale of electricity</i>			
Domestic or residential	250.8	288.5	322.6
Commercial, light & small power	255.7	282.9	317.5
Industrial	314.0	379.9	428.6
Traction	137.7	179.0	219.6
Irrigation	410.2	498.8	543.5
Public lighting	284.5	319.9	361.8
Water works	206.2	226.1	252.5
Index of total sale	288.9	345.3	389.6

Resources

Power potential studies of the river basins of India indicate an aggregate hydro-electric potential of the order of 4 crore kw at 60 per cent load factor, as follows :

	Lakh kw.
West-flowing rivers of Western Ghats	43
East-flowing rivers of southern India	86
Central Indian rivers	43
Ganga Basin (excluding the potential in Nepal)	48
Brahmaputra, Manipur and Tyao (excluding the potential in Sikkim)	1,25
Indus	66
TOTAL	4,11

The pattern of power development in India, at present is as follows :

Mysore, Kerala, Punjab, Orissa, Jammu & Kashmir	mainly hydro
Bihar, West Bengal, Gujarat and Rajasthan	mainly thermal
Maharashtra, Madras, Andhra Pradesh, Uttar Pradesh, Assam and Madhya Pradesh. }	partly thermal,
	partly hydro

As at present visualised, power development in India will eventually be one of inter-connected hydro-electric and thermal power stations in various regions. It is conceivable that the regional systems will, in due course, be inter-connected so as to form an all-India grid, alongside the development of some of the large power resources which are capable of providing adequate capacity to meet the needs of outlying areas.

Organisation for Power Development

The generation and distribution of electricity in India was for a long time governed by the Indian Electricity Act of 1910. The Electricity (Supply) Act passed in 1948 provided for the setting up of a Central Electricity Authority for the entire country as well as State organisations known as State Electricity Boards. Accordingly, the Central Electricity Authority was constituted in 1950 and during subsequent years State Electricity Boards were constituted in all the States.

Ownership

Until 1925, the development of electric power was confined mainly to private companies that took out licences under the Indian Electricity Act 1910. It was only in the late twenties that schemes for the development of power were launched by some of the States. In March 1963, private companies owned 75 per cent of the public utility undertakings and 25.5 per cent of the total installed capacity as shown in Table 133.

TABLE 133
OWNERSHIP : PUBLIC UTILITY INSTALLATIONS
(MARCH 1963)

Ownership				Number of under- takings (reckoned on the basis of ownership)	Installed generating capacity (in kw)
State governments or State electricity boards .. .. .	..	..	..	20	36,82,941
Power corporations .. .. .	..	..	..	1	5,24,000
Municipalities .. .. .	..	..	..	58	98,703
Private companies .. .. .	..	..	..	238	14,74,151
TOTAL				317	57,79,795

Consumption

The table below shows the demand for electricity from different classes of consumers during 1962-63.

TABLE 134
CLASSES OF CONSUMERS
(1962-63)

Nature of use	No. of Consumers		Connected load		Energy Sales	
	In thou- sands	Percent- age of total	Total (thou- sand kw)	Percent- age of total	Cre kwh	Percent- age of total
Domestic ..	4,303	75.50	2,451	26.55	1,917.8	10.27
Commercial ..	914	16.04	760	8.23	1,048.6	5.61
Industrial (in- cluding water works & trac- tion) ..	211	3.70	4,845	52.48	14,364.1	76.90
Public lighting ..	18	0.32	97	1.06	245.0	1.31
Irrigation & de-watering ..	253	4.44	1,078	11.68	1,103.5	5.91
TOTAL ..	5,699	100.00	9,231	100.00	18,679.0	100.00

Rural Electrification

A few large power systems serve the needs of rural areas. Rural electrification has so far made some progress in Andhra Pradesh, Bihar, Kerala, Madras, Maharashtra, Mysore, Punjab, Uttar Pradesh and West Bengal.

The following table gives the distribution of towns and villages in terms of population range, numbers electrified during different Plan periods, and those expected to be electrified by the end of the Third Plan.

TABLE 135
TOWNS AND VILLAGES ELECTRIFIED

Population range	Total number (1951 Census)	Number electrified by March, 31				
		1951	1956	1961	1962	1966 esti- mated
Over 1,00,000 ..	73	49	73	73	73	73
50,000 to 1,00,000 ..	111	88	111	111	111	111
10,000 to 50,000 ..	1,257	500	716	1,099	1,110	1,257
Below 10,000 ..	5,59,665	3,050	6,500	22,686	25,889	41,559
TOTAL ..	5,61,106	3,687	7,400	23,969	27,183	43,000

DEVELOPMENT PROGRAMME

The total installed generating capacity in the country at the beginning of the First Plan stood at 23 lakh kw. During the First Plan, the aggregate installed generating capacity increased by 11.2 lakh kw or by about 49 per cent. During the Second Plan there was an increase of 64 per cent in the generating capacity which rose from 34.2 lakh kw to 56 lakh kw. By the end of the Third Plan, the aggregate capacity of the plants in commission and under erection and testing is expected to be of the order of 134 lakh kw of which about 127 lakh kw are expected to be in commercial operation. With the completion of this programme, per capita generation of electricity would have risen from 18 kwh in 1951, 28 kwh in 1956 and 45 kwh in 1961 to about 100 kwh in 1966.

The following table shows the growth of installed capacity and energy generated at the beginning and end of the First and Second Plans and the targets for the Third Plan.

TABLE 136
POWER GENERATION UNDER THE PLANS

	1950-51	1955-56	1960-61	1965-66 (esti- mated)
Installed capacity (<i>in lakhs of kw</i>)				
Public Utility Undertakings				
(a) State-owned	6	14	32	93.4
(b) Company-owned	11	13	14	17.4
Self-generating industrial establishments	6	7	10	14.2
TOTAL ..	23	34	56	125.0
Energy generated (<i>in crores of kwh</i>)				
(a) State-owned	210	450	1,093	3,450
(b) Company-owned	300	430	592	650
Self-generating industrial establishments	147	200	319	400
TOTAL ..	657	1,100	2,004	4,500

The estimated cost of the power programme in the public sector in the Third Plan is Rs. 1,039 crores. Investment in the private sector is expected to be of the order of Rs. 50 crores. The approximate breakup of the programme in the public sector is Rs. 661 crores for hydro and thermal generating schemes, Rs. 51 crores for atomic power and about Rs. 327 crores for transmission and distribution schemes including Rs. 105 crores for rural electrification.

Nuclear Power

Having regard to the available energy resources, nuclear power is expected to play a progressively increasing part in meeting energy demands in future years. A nuclear power station is planned for construction at

Tarapur, near Bombay. It will consist of two reactors, each producing 190 mw of power. The power station is expected to be commissioned in the Fourth Plan. It is proposed to instal a second atomic power station near Rana Pratap Sagar dam.

MAJOR POWER PROJECTS

The principal power generation schemes included in the Third Plan are given in Table 139 at the end of this chapter. Some of the major power projects are briefly described below.

Machkund Project

A joint venture of the Governments of Andhra Pradesh and Orissa, this hydro-electric project harnesses the river Machkund which forms the boundary between the two States. A dam, 176 ft. high above foundations and 1,345 ft. long, has been constructed at Jalaput across the Machkund river to store 6,25,000 acre-feet of water. Three generating units of 17,000 kw each and three units of 21,250 kw each have been commissioned. The total installed capacity of the power station is now 1,14,750 kw.

Srisaillam Hydro-electric Project

The Srisaillam project (estimated cost Rs. 38.48 crores) envisages the construction of a 385-ft. high and 1,685-ft. long stone-masonry dam across the Krishna river, about 64 miles upstream of Nagarjunasagar dam site. The releases from the reservoir are proposed to be utilised for power generation at a station at the toe of the dam, with an initial installation of four units of 110 mw, and with provision for adding three such units at a later stage. The first two units are expected to be commissioned in 1968-69 and the other two in 1969-70 and 1970-71 respectively.

Barauni Thermal Power Station

In order to meet the growing power demand in north Bihar, installation of a steam power station of 30 mw capacity (cost Rs. 13.47 crores) under stage I has been set up at Barauni. Following the installation of the oil refinery at Barauni it has been decided to instal a third set of 15 mw to increase its firm capacity from 15 mw to 30 mw to meet the power demand of the refinery and other major industries in the area. Two more units of 50 mw each have also since been sanctioned for installation in this power house.

The third unit of 15 mw is expected to be commissioned in 1964-65 and the two units of 50 mw each in 1965-66.

Pathratu Thermal Power Station

The proposed thermal power station (cost Rs. 39.30 crores) for supplying power to the Heavy Engineering Corporation at Hatia is to be located 3½ miles from Pathratu railway station and about 25 miles from Ramgarh in Hazaribagh district. It will have an installed capacity of 400 mw. The first stage will include two units of 50 mw each and the second stage two units of 50 mw each and two units of 100 mw each. Excavation work for the main power station building has been completed. The first three units will be commissioned in 1965.

Dhuvaran (Cambay) Thermal Power Station

In order to meet the growing demands in the Saurashtra and Gujarat areas, a thermal power station (cost Rs. 25 crores) is to be installed at Dhuvaran, a village situated near the gulf of Cambay. The proposed station will have four turbo alternators with an installed capacity of 62.5 mw each. Construction work on the scheme is in progress. The first two units are expected to be commissioned in 1964 and the remaining two in 1964-65.

Iddiki Hydro-electric Scheme

The project (cost 49.60 crores) located in the high range of Periyar about 100 miles south-east of Ernakulam envisages (i) a common storage reservoir formed by two main dams, one 530-ft. high across Periyar at Iddiki Gorge and the other 435-ft. high across Cherutoni, a tributary of the Periyar, (ii) a power house with ultimate installed capacity of 8,00,000 kw with 8 units of 10,000-kw each. Initially five units will be installed. The first unit will be commissioned in 1969.

Satpura Thermal Power Station

This is a joint project of Rajasthan and Madhya Pradesh and is being executed to meet the anticipated load demand in 1965-66 in the areas of western Madhya Pradesh and Rajasthan served by the Chambal grid system. It will be a thermal station in the Pathakheda coalfields, in Betul district. The power station will consist of five boilers supplying steam to five turbo alternators each of 62,500 kw (MCR) capacity. The scheme will supply power to the proposed fertiliser plant near Itarsi, Nepa Mills, Neapanagar, Heavy Electricals Ltd., Bhopal, cotton and silk textile mills, cement factory, fire bricks factory, etc., in Madhya Pradesh besides releasing 100 to 120 mw of power to Rajasthan.

The first unit is expected to be commissioned during 1965.

Mettur Tunnel Hydro-electric Scheme

The scheme (cost Rs. 8.89 crores) provides for the utilisation of the discharge of 20,000 cusecs from the Mettur Reservoir during the irrigation period for power generation by installing four units of 50 mw each. The power station will be linked to the State grid at Salem by a 25-mile long 220-kw single circuit transmission line. The first two units are expected to be commissioned in 1964-65 and the other two in 1965-66.

Koyna Project

The first stage of the project inaugurated in January 1954, and estimated to cost Rs. 38.28 crores envisages the construction of a 208 ft. high dam across the river Koyna and a tunnel for diverting the waters of the river to ensure a drop of about 1,570 feet. The underground power house has four units of 60,000 kw each, all of which have been commissioned. The project supplies power to Bombay-Poona area and the adjoining districts.

Sharavathi Hydro-electric Project

The Sharavathi Valley project is proposed to be developed in two stages. The first stage consists of the construction of a 194 ft. high dam near Linganamakki village with a reservoir capacity of 15,600 crore cft., necessary water conductor system and installation of two generating units of 89,100 kw each. The second stage contemplates raising the dam and construction of other civil works and installation of six more generating units of 89,100 kw capacity in the Sharavathi power station. The two units of the first stage and the first unit of the second stage will be commissioned in 1964.

The first stage of the project will cost Rs. 51.81 crores and the second stage Rs. 22.77 crores.

Talcher Thermal Station

The scheme (cost Rs. 30.35 crores) envisages the construction of a thermal power station comprising four generating units of 50/62.5 mw each in Talcher area, where abundant reserves of low grade coal are available. It is proposed to inter-connect this power house with Hirakud system. The project is being financed with DLF assistance.

Bhakra Right Bank Power Station

In order to utilise the power potential available at Bhakra dam and to cater to the growing load demand in the Punjab, Delhi and Rajasthan areas,

it has been decided to construct a power house (cost Rs. 30.77 crores) on the right bank of river Sutlej at the foot of the dam. The power house will have four generating units of 70,000, 1,20,000 kw each. The first unit is expected to be commissioned in early 1966 and the remaining three in 1966-67.

Yamuna Hydel Scheme

The scheme proposes to harness the river Yamuna and its tributary Tons in two stages. Under stage I there will be two power houses on the power channel, one at Dhakrani and the other at Dhalipur with an installed capacity of 33,750 kw and 51,000 kw, respectively.

Stage II envisages the construction of a diversion dam 47.6 metres high near village Ichari on river Tons, situated 28.8 km. upstream of its confluence with Yamuna. An underground power house at Chibro below the left bank of Tons with an installed capacity of four units of 60 mw each (part I) and four of 24 mw each (part II). The units under stage I are expected to be commissioned in 1966 and those under stage II in 1971. The first stage is estimated to cost Rs. 16.83 crores and the second Rs. 55.88 crores.

Rihand Dam Project

The Rihand project, estimated to cost Rs. 46.05 crores, includes the construction of a concrete gravity dam about 300 ft. high and 3,065 ft. long across the river Rihand near the village of Pipri in the Mirzapur district of Uttar Pradesh, about 29 miles south of the confluence of the Rihand and the Sone rivers. The reservoir, 180 square miles in area, to be created by the dam, will store 86 lakh acre-ft. of water. A power station with an initial capacity of 2.5 lakh kw has been constructed. Its ultimate installed capacity will be 3 lakh kw. A network of transmission lines with the necessary transmission and switching sub-stations will cover the entire eastern and south-eastern region of Uttar Pradesh. Power from the project will be used for the industrial and agricultural development of this economically backward region with a population of over 2.5 crores, by providing cheap power for cottage industries as well as for medium and major industries and pumping schemes for irrigation. This power station will also supply power to the aluminium industry which is the first of its kind in the State. The project will further provide irrigation benefits to about 14 lakh acres in Uttar Pradesh and about 5 lakh acres in Bihar.

Bandel Thermal Station

This power station (cost Rs. 29.90 crores) will be located about 35 miles north of Calcutta close to the river Hooghly, by the side of Bandel-Baharwa railway line and at the centre of a rapidly growing industrial area. The first stage will consist of four units of 75 mw each. Two units are expected to be commissioned during 1964 and the remaining two in early 1965.

FLOOD CONTROL

Following the disastrous floods in different parts of the country during the 1954 monsoon season, the Government of India formulated a comprehensive national programme of flood control in September 1954. Divided into three phases, the programme was devoted during the first two years mainly to intensive investigations, collection of data, and execution of some emergent works, while the second phase, covering the next four or five years, roughly corresponding to the Second Plan period, envisaged flood control measures such as embankments, channel improvements, raising of the level of villages, etc. The third phase envisages long-term measures, like the construction of flood-moderating reservoirs and additional embankments, where necessary, on the basis of comprehensive and integrated plans for flood control in each river basin. Special attention is being paid to drainage and anti-waterlogging measures.

Flood Control Boards assisted in technical matters by Technical Advisory Committees exist in 15 States with a Central Flood Control Board at the Centre. Four River Commissions (Floods) also assist the Central Flood Control Board in technical matters. Five major schemes, each costing Rs. 1 crore and above and 1,196 minor schemes each costing less than Rs. 1 crore received from the various States have been approved by the Centre since 1954-55, involving outlays of Rs. 17.44 crores and Rs. 53.72 crores respectively.

Out of a total programmed area of 52,191 sq. miles of aerial photography, an area of 51,947 sq. miles has been surveyed by the Survey of India. The progress in regard to photomosaics was 65,994 sq. miles out of a programme of 66,214 sq. miles. About 3,800 miles of embankments were completed in various States. These works and other flood control works and the embankments on the Kosi have benefited an area of about 71 lakh acres. In addition, 58 towns have been afforded protection against floods and/or erosion and the level of 4,386 villages has been raised above flood level.

Although much progress has been made in the field of investigations and execution of schemes, floods during the past few years have posed new problems demanding fresh thinking on the subject. The problems of water-logging and drainage in different parts and sea-erosion in Kerala call for particular attention. Accordingly, region-wise flood control seminars are being organised by States. Three such seminars for the Ganga, north-west and central regions have been held at Nainital, Simla and Hyderabad. The recommendations of these and other seminars to follow will be utilised for making modifications, if any, in the policy and programme of flood control.

Flood control, drainage and anti-waterlogging are closely related to irrigation and have to be viewed together in formulating comprehensive development programmes. Owing to the dearth of sufficient data, the flood control programme had to be taken up on an *ad hoc* emergency basis during the Second Plan period. In the Third Plan, as a result of surveys and investigations carried out in recent years, flood control, drainage, anti-waterlogging and anti-sea-erosion schemes have been incorporated in the irrigation plans of the States for which an outlay of Rs. 61 crores has been provided.

TABLE 137
PRINCIPAL IRRIGATION WORKS*

	Year of completion	Total outlay (Rs. lakhs)	Area irrigated (thousand acres)
Andhra Pradesh			
Godavari delta system	1890	2,20.0	11,11.0
Nizam Sagar	1931	3,92.0	2,75.0
Romperu drainage	1956	1,28.4	8.2
Rallapad	1957	1,04.0	9.5
Upper Pennar	1958	1,58.0	9.8
K.C. canal	1963-64	7.5	2,78.0
Godavari (stage I)	1962-63	7,84.1	65.0
Prakasam barrage	1959-60	3,91.0	1,17.0
Bhairavani tipka	1961-62	1,44.7	9.7
Bihar			
Sone canals	1874	2,68.0	8,58.0
Kamla canal	1958	30.9	38.0
Mayurakshi left bank canal	1957	81.1	25.0
Tribeni canal extension	1958-59	1,12.9	62.1
Nagi dam	1960-61	40.2	7.5

*This is not an exhaustive list but contains only selected works.

TABLE 137 (contd.)

	Year of completion	Total outlay (Rs.lakhs)	Area irrigated (thou- sand acres)
<i>Gujarat</i>			
Rangola	1952	66.4	19.5
Brahmani	1954	90.8	27.0
Moj	1956	9.4	15.0
Aji	1961-62	65.5	4.2
Machhu I	1961-62	1,58.5	22.0
<i>Janmu and Kashmir</i>			
Sind valley	1956	1,24.0	18.0
<i>Kerala</i>			
Kuttanad	1957	59.6	1,21.0
Peechi	1957-58	2,35.0	69.4
Chalakudy (stage I)	1957-58	1,53.2	56.8
Walayar reservoir	1958-59	1,16.7	16.0
Wadakkancheri (Vezhani)	1959-60	1,07.6	17.6
Nayyar I	1959-60	2,47.3	38.0
Malampuzha	1959-60	532.0	10,9.0
<i>Madhya Pradesh</i>			
Tandula canals	1925	34.0	1,65.0
Mahanadi canals	1927	1,59.0	2,10.0
Sampna	1959	45.2	9.5
Gangulpara	1960-61	51.9	8.5
<i>Madras</i>			
Periyar system	1897	1,08.0	1,43.0
Kaveri Mettur	1934	6,63.0	3,01.0
Perinchari	1956	44.0	6.0
Lower Bhavani	1956	10,47.2	2,07.0
Mettur canals	1957	1,92.9	45.0
Aranar reservoir	1957	1,05.9	6.1*
Krishnagiri	1958	2,02.4	9.0
Sathanur	1959	2,58.0	21.0
Amaravathy	1959	3,29.4	53.5
Kattalai high level canal scheme	1959	2,24.6	20.6
Pullambadi canal scheme	1959	2,06.1	22.1
<i>Maharashtra</i>			
Nira left bank canal	1906	1,06.0	83.0
Pravara river works	1911	1,53.0	84.0
Nira right bank canal	1938	6,02.0	81.0
Gangapur reservoir	1959	3,96.0	45.0
<i>Mysore</i>			
Krishnaraja Sagar canal	1930	4,50.0	1,00.0
Tunga anicut	1958-59	2,96.9	27.2
Nagu	1958-59	3,11.1	20.0
Ghataprabha left bank canal (stage I)	1958-59	5,67.1	120.0
<i>Orissa</i>			
Rushi-Kulya canal system	1895	28.0	1,40.0
<i>Punjab</i>			
Upper Bari Doab canal	1878-79	2,27.0	8,28.0
Western Yamuna canal	1886	4,73.0	10,18.0
Sirhind canal	1886-87	6,70.0	14,83.0
Eastern canal extension	1933	8,38.0	3,49.0
Western Yamuna canal extension	1944-45	1,58.0	1,21.0
Nangal barrage	1954	3,95.0	27,50.0
Dadri	1961	79.0	**
<i>Rajasthan</i>			
Jawai project	1958-59	2,50.0	19.0
Prabati project	1961	1,10.0	30.0
Meja project	1961	71.0	24.0
Sareri	1960	30.0	13.0
Namona	1959	53.0	11.0
<i>Uttar Pradesh</i>			
Ganga canal	1891	4,65.0	17,27.0
Lower Ganga canal	1891	4,69.0	11,52.0

*Madras portion.

**Linked with Western Yamuna Canal.

TABLE 137 (concl'd.)

	Year of completion	Total outlay (Rs. lakhs)	Area irrigated (thousand acre)
Betwa canal	1893	1,22.0	2,06.0
Gavai and Ghagar canal	1918	1,20.0	55.0
Sarada canal	1930	11,37.0	19,72.0
Sarada canal extension (1,062 miles)	1955-56	1,37.8	1,76.0
Mata Tila (stage I)	1957-58	4,88.0	2,65.0
Jirgo reservoir	1960	1,26.8	64.0
Sarada sagar (stage I)	1960-61	4,79.0	1,67.4
Belan and Tons canal	1958-59	2,94.1	1,02.0
Agra canal (remodelling)	1959-60	80.0	27.4
Ban Ganga canal	1956-57	43.1	22.0
<i>West Bengal</i>			
Damodar canal	1935	1,30.0	1,72.0
Mayurakshi	1970	20,46.0	6,10.0

TABLE 138
PRINCIPAL IRRIGATION PROJECTS IN THE THIRD PLAN

	Total cost* (Rs. in lakhs.)	Provision for the 3rd Plan (irrigation) (Rs. in lakhs.)	Annual benefits (⁰ 000 acres)	
			On completion	During the 2nd Plan period
<i>Continuing Schemes</i>				
Bhakra Nangal (Punjab and Rajasthan)	**175,31	4,19	36,00	22,50
Damodar Valley (W. Bengal & Bihar)	34,68	2,56	10,73	5,68
Hirakud—stage I—including Mahanadi delta (Orissa)	97,52	12,35	15,23	3,97
Chambal—stage I (Rajasthan & M.P.)	51,90	11,38	11,00	3,75
Tungabhadra (Andhra Pradesh and Mysore)	45,85	6,40	8,29	N.A.
Mayurakshi (West Bengal)	20,46	4,67	6,10	4,65
Bhadra (Mysore)	31,93	13,41	2,42	32
Kosi (Bihar)	32,88	12,00	14,05	—
Nagarjunasagar—stage I (Andhra Pradesh)	139,53	50,00	20,00	—
Kakrapara canal (Gujarat)	18,65	3,00	5,42	50
Rajasthan canal	138,70	38,00	28,75	—
Tungabhadra high level canal—stage I (Andhra Pradesh & Mysore)	18,59	10,26	1,89	—
Ukai (Gujarat)	33,72	6,00	3,92	—
Tawa (Madhya Pradesh)	19,80	10,00	780	—
Purna (Maharashtra)	14,71	8,94	1,52	—
Narmada (Gujarat)	41,41	11,00	9,63	—
Banas (Gujarat)	10,08	6,05	1,10	—
Mula (Maharashtra)	15,00	6,00	1,31	—
Girna (Maharashtra)	13,69	5,19	1,43	52
Khadakvasala (Maharashtra)	10,55	5,96	77	—
New Kattalai (Madras)	2,25	(—) 2.60	21	12
Salandi (Orissa)	11,21	4,71	3,28	—
Gurgaon canal (Punjab)	4,48	1,50	2,75	10
Kangsabati (West Bengal)	25,26	5,09	9,50	—
Chandrakeshar (Madhya Pradesh)	89	81	12	—

*Irrigation portion only.

**Total cost.

TABLE 138 (concl'd.)

	Total cost (Rs. in lakhs)	Provision for the 3rd Plan (Irrigation) (Rs. in lakhs)	Annual benefits ('000 acres)	
			On comple- tion	During the 2nd Plan period
Kabini (Mysore)	10.00	1.20	30	—
Banas (Rajasthan)	10.07	1.50	2.00	—
Bhadra (Gujarat)	4.53	4.36	45	—
Boothathankettu (Kerala) ..	3.48	1.81	63	—
Lidder canal (Jammu & Kashmir)	4.41	1.00	8	2
Barna (Madhya Pradesh) ..	5.56	2.00	1,64	—
Laxmanathirtha (Mysore) ..	30	21	3	—
Vidur (Pondicherry & Madras)	89	(—)1.94	(—)3	3
Ram Ganga (Uttar Pradesh)	3,835	16,00	17,05	—
<i>New Schemes</i>				
Vamsadhara (Andhra Pradesh)	13.59	2,86+	2,96	—
Vottigedda (Andhra Pradesh)	77	78	10	—
Koyna irrigation scheme (Maharashtra)	9.50	105	11	—
Bhima irrigation scheme (Maharashtra)	40.91	78	4,69	—
Pus river scheme (Maharashtra)	2.16	1.37	N.A.	—
Malaprabha project (Mysore)	20.00	3.00	3,00	—
Hemavathi project (Mysore)	3.90	30	33	—
Birgovindpur irrigation scheme (Orissa)	6.96	1.50	2,24	—
Jamuna irrigation scheme (Assam)	1.93	1,68	81	—
Western Kosi canal system (Bihar)	13.49	2,00	8,04	—
Tista multipurpose barrage project (West Bengal)	120.08	1.00	28,50	—
Hasdeo project barrage— phase I (Madhya Pra- desh)	100,150	1,50	—	—
Beas project (Punjab & Rajasthan)	700	37,00	15,30	—
Gandak canal (Uttar Pradesh & Bihar)	90.56	30,00	33,27	—
Saraju canal (Uttar Pradesh)	26.02	2,00	6,27	—
High level canal from Vishow to Nawkarawa (Jammu & Kashmir)	75	25	15	—
Kallada (Kerala)	844.70	50	2,17	—
DVC—extension & improve- ment, etc. (West Bengal)	5.95	5,95	1,10	—
Baur (Uttar Pradesh)	2.95	1,53	47	—
Jamni (Uttar Pradesh)	2.63	89	0.34	—

TABLE 139

**PRINCIPAL POWER GENERATION SCHEMES INCLUDED IN THE
THIRD PLAN WITH BENEFIT POTENTIAL**

Name of the scheme	Total instal- led capacity (in thousand kw)
<i>Continuing Schemes</i>	
Tungabhadra hydro-electric project—stage II (Andhra Pradesh and Mysore)	36
Nellore thermal station (Andhra Pradesh)	30
Upper Sileru hydro-electric project—stage I (Andhra Pradesh) ..	1,20
Umiam hydro-electric project—stage I (Assam)	36
Barauni thermal station (Bihar)	30
Pathratu thermal station (Bihar)	1,00

†Including Panchampad.

TABLE 139 (contd.)

Name of the scheme	Total instal- led capacity (in thousand kw)
Chandrapura thermal station (DVC)	2,80
Ahmedabad thermal station extension—private sector (Gujarat)	60
Heriamangalam hydro-electric project (Kerala)	30
Panniar hydro-electric project (Kerala)	30
Sholayar hydro-electric project (Kerala)	54
Gandhi Sagar dam power station—IV Unit (Madhya Pradesh and Rajasthan)	23
Amarkantak thermal station (Madhya Pradesh)	60
Neyveli lignite power station (Madras)	2,50
Kundah hydro-electric project (Madras)	35
Koyna hydro-electric project—stage I (Maharashtra)	2,40
Purna hydro-electric project (Maharashtra)	15
Bhadra hydro-electric project (Mysore)	33
Tungabhadra left bank power house (Mysore)	27
Sharavathy hydro-electric project—stage I (Mysore)	1,78
Hirakud hydro-electric project (Orissa)	1,47
Bhakra-Nangal project (Punjab & Rajasthan)	2,17
Rana Pratap Sagar dam power house (Rajasthan & Madhya Pradesh)	1,29
Rihand hydro-electric project (Uttar Pradesh)	2,50
Kanpur thermal station extension (Uttar Pradesh)	15
Harduaganj thermal station (Uttar Pradesh)	60
Matalila hydro-electric project (Uttar Pradesh)	30
Ramuna hydro-electric project (Uttar Pradesh)	3,24
Ramanga hydro-electric project (Uttar Pradesh)	1,35
Jaldhaka hydro-electric project (West Bengal)	18
Durgapur coke-oven plant power house extension (West Bengal)	1,50
Delhi thermal station extension (Delhi)	30
<i>New Schemes</i>	
Kothagudem thermal station (Andhra Pradesh)	1,20
Ramagundam thermal station extension (Andhra Pradesh)	60
Nagarjunasagar hydro-electric project (Andhra Pradesh)	1,00
Srisailem hydro-electric project (Andhra Pradesh)	4,40
Gas turbines (Andhra Pradesh)	20
Upper Sileru hydro-electric project—stage II (Andhra Pradesh)	1,80
Naharkatiya thermal station (Assam)	92
Umiam hydro electric project—stage II (Assam)	65
Nangwal-Bibra thermal station (Assam)	60
Kopili hydro-electric project (Assam)	3,90
Diesel extensions (Assam)	10
Barauni thermal station extension (Bihar)	1,15
Pathratu thermal station extension (Bihar)	3,00
Thermal extensions in DVC area	2,80
Gandak hydro-electric project (Bihar)	15
Kosi hydro-electric project (Bihar)	20
Ahmedabad thermal station extension—private sector (Gujarat)	30
Shahpur thermal station extension (Gujarat)	10
Dhuvaran (Cambay) thermal station (Gujarat)	2,40
Kandla thermal station (Gujarat)	10
Chenani hydro-electric project (Jammu & Kashmir)	15
Jhelum hydro-electric project (Jammu & Kashmir)	1,00
Salal hydro-electric project (Jammu & Kashmir)	60
Kalakote thermal station (Jammu & Kashmir)	20
Nichohom thermal station (Jammu & Kashmir)	15
Sabrigiri (Pamba) hydro-electric project (Kerala)	3,00
Idikki hydro-electric project (Kerala)	5,00
Kuttiadi hydro-electric project (Kerala)	75
Korba thermal station extension (Madhya Pradesh)	2,00
Satpura thermal station (M.P. and Rajasthan)	3,00
Gandhi Sagar V Unit (M.P. and Rajasthan)	23
Tawa hydro-electric project (Madhya Pradesh)	42
Punasa hydro-electric project (M. P. & Gujarat)	5,76
Kundah hydro-electric project (Madras)	2,45
Mettur tunnel hydro-electric project (Madras)	2,00
Periyar hydro-electric project (Madras)	35

TABLE 139 (concl'd.)

Name of the scheme	Total installed capacity (in thousand kw)
<i>New Schemes—(continued)</i>	
Neyveli lignite power station extension (Madras)	1,50
Parambikulam hydro-electric project (Madras)	1,80
Koyna hydro-electric project—stage II (Maharashtra)	3,00
Trombay thermal station extension (Maharashtra)	1,25
Khaperkheda thermal station extension (Maharashtra)	60
Akola Paras thermal station extension (Maharashtra)	60
Koyna power station at the foot of the dam (Maharashtra)	40
Bhusawal thermal station (Maharashtra)	60
Sahasrakunda hydro-electric scheme (Maharashtra)	50
Nuclear power station (Maharashtra & Gujarat)	3,80
Vaitarna hydro-electric project (Maharashtra)	45
Sharavathy hydro-electric project—stage II (Mysore)	5,35
Kalinadi hydro-electric scheme (Mysore)	5,90
Sharavathy tail race development (Mysore)	1,45
Package gas turbines installation (Mysore)	20
Talcher thermal station (Orissa)	2,40
Balimela hydro-electric scheme (Orissa and Andhra Pradesh)	1,80
Faridabad thermal station (Punjab)	15
Bhakra right bank power house (Punjab & Rajasthan)	4,80
Uhl river hydro-electric power project—stage II (Punjab)	45
Diesel station (Punjab)	10
Upper Bari-Doab canal project (Punjab)	330
Beas project—stage I (Punjab & Rajasthan)	7,56
Diesel stations (Rajasthan)	10
Kotali hydro-electric project (Rajasthan & M.P.)	1,00
Harduaganj thermal station extension (U.P.)	30
Sigrauli thermal station (U.P.)	2,50
Obra hydro-electric project (U.P.)	1,00
Kanpur thermal station (U.P.)	60
Martin Burn extensions, Agra & Lucknow—private sector (U.P.)	20
Hindustan Aluminium self-generation (U.P.)	1,25
Rihand VI unit	50
Bandel thermal station (West Bengal)	3,00
Durgapur coke-oven plant station extension (West Bengal)	75
Calcutta electric supply co. extension—private sector (West Bengal)	50
Jaldhaka—stage II (West Bengal)	9
15 mw. thermal station (Delhi and Punjab)	15
Delhi thermal station extension (Delhi and Punjab)	1,80

CHAPTER XX

INDUSTRY

The Annual Survey of Industries in India, undertaken from 1959, replaces both the Census and the Sample Survey of manufacturing industries which were being conducted previously.

The Survey covers all factories registered under the Factories Act, 1948, employing 50 or more workers with the aid of power or 100 or more workers without the aid of power. Such factories account for about 85 per cent of India's total factory employment. The remaining factories are covered on the basis of probability sample.

According to the Survey for 1960, registered factories in India numbered 8,704, of which returns were received from 8,391 or about 96 per cent. The productive capital of the factories totalled about Rs. 1,999.54 crores comprising Rs. 1,286.63 crores of fixed and Rs. 712.91 crores of working capital.

The number of persons employed was 25,80,599 workers and 3,23,349 other than workers making a total of 29,03,948. The man-hours worked totalled nearly 591.2 crores.

The salaries, wages and benefits of the employees came to Rs. 481.56 crores of which workers accounted for Rs. 342.36 crores, other than workers for Rs. 98.69 crores and money value of benefits and privileges for Rs. 40.51 crores.

Input amounted to Rs. 2,286 crores; the major heads being (a) fuels, electricity, lubricants, etc., consumed—Rs. 143.48 crores; (b) material consumed—Rs. 1,896.90 crores; (c) work done by other concerns—Rs. 28.28 crores; (d) depreciation—Rs. 103.60 crores; and (e) others—Rs. 113.74 crores.

Output was of the order of Rs. 3,150.38 crores consisting of (a) products and by-products—Rs. 2,994.69 crores; (b) additions in stocks of semi-finished products—Rs. 13.59 crores; and (c) work done for customers—Rs. 142.10 crores.

Value added by manufacture worked out to about Rs. 864.38 crores.

Other studies, by the Reserve Bank of India*, of the finances of Indian joint stock companies show that in 1961 the value of production (sale plus increase in closing stocks over opening stocks) of 1,333 selected large and medium sized public limited companies** was Rs. 2,867 crores, registering an increase of Rs. 218 crores or 8.2 per cent over the preceding year which was only slightly more than half the 1960 percentage rise (15.1) and even lower than the average of 12.1 per cent per annum during 1956 to 1960. Nearly 70 per cent of the total value of production was contributed by cotton and jute textiles, engineering, trading, sugar, iron and steel and chemicals.

Sales of the selected companies improved by Rs. 260 crores (10.11 per cent) to a total of Rs. 2,831 crores, as compared to a rise of 11.1 per cent during 1960.

*For details, see *Reserved, Bank of India Bulletins*, June and September 1963, and February 1964.

**Including tea, coffee and rubber plantations, sugar, cotton and jute textiles, iron and steel, engineering, chemical, cement and paper industries with a paid-up capital of Rs. 5 lakhs and over; the break-up according to size of paid-up capital was : Rs. 5—10 lakhs, 339 companies; Rs. 10—25 lakhs, 450; Rs. 25—50 lakhs, 260; Rs. 50 lakhs—Rs. 1 crore, 166 and above Rs. 1 crore, 118 companies (total 1,333 companies).

At the end of November 1963, there were 25,823 companies at work, with a total paid-up capital of Rs. 2,296.3 crores. Of these, 5,958 were public limited companies with a total paid-up capital of Rs. 1,112.4 crores; the remainder were private limited companies. In addition, there were 1,158 companies limited by guarantee and associations not for profit.

Gross profits as percentage of total capital employed were 10.1 and 10.0 in 1960 and 1961 respectively. Profits before tax rose from Rs. 212.56 crores in 1960 to Rs. 228.35 crores in 1961, representing a rise of only 7.4 per cent in 1961 as against 14.8 per cent in 1960. The greater rise in the provision in pre-tax profits resulted in a fall in distributable profits, for the first time in three years. Profits after tax declined by Rs. 1.6 crores or by 1.2 per cent as against a rise of 11.6 per cent in 1960. Gross capital formation in 1961 amounted to Rs. 265 crores, showing a rate of increase of 10.1 per cent against 10.6 per cent in 1960 and as much as an annual average of 14 per cent for 1956 to 1960.

Taking all companies together, internal sources provided a major proportion of the finances though in some industries, which made important contribution to capital formation, external finance was relatively larger.

The fall in the rate of growth in the value of production, sales, profits and capital formation during 1961 compared to 1960 was largely due to a slackening in the rate of progress in agricultural and industrial sectors, shortage of raw materials, import restrictions and transport, coal and power difficulties.

During 1962, the expansion rate of the value of production of 540 medium and large public limited companies (included in the sample of 1,333 companies mentioned above) was lower at 8.4 per cent compared to 10.4 per cent in 1961 in respect of 562 companies. The increase in pre-tax profits was also substantially lower at 2.1 per cent against 12.6 per cent in 1961 mainly as a result of rise in manufacturing costs. Tax provision, on the other hand, rose by 34.3 per cent. Outlay on fixed assets was 8.9 per cent as compared to 11.8 per cent in 1961. With the rate of inventory build-up maintained at the 1961 level of 10 per cent, the decline in the rate of gross capital formation was smaller than in fixed assets formation. The share of external sources in assets formation moved up from 41 per cent of total resources in 1961 to 54.6 per cent in 1962.

The working, in 1961, of 1,018 small public limited companies with a paid-up capital of Rs. 5 lakhs and below, shows that their total value of production at Rs. 115.1 crores was 10.2 per cent more than the 1960 figure of Rs. 104.4 crores; but the percentage increase was substantially lower than 18-19 per cent in 1960. Profits before tax amounted to Rs. 4.78 crores in 1961, registering a rise of 2.4 per cent as against 7.5 per cent in 1960. Profits after tax in 1961 declined by Rs. 22 lakhs or 9.3 per cent against an increase of 12.4 per cent in 1960. Gross profits as percentage of total capital employed worked out to 7.7 per cent and 7.4 per cent in 1960 and 1961, respectively. Nevertheless, the gross and net fixed assets formation of these companies improved from 7.6 and 7.4 per cent in 1960 to 8.8 and 8.0 per cent, respectively, in 1961.

INDUSTRIAL POLICY

Independent India's industrial policy, envisaging a mixed economy, was first announced in 1948*. A fresh statement of industrial policy, necessitated by the acceptance of a socialist pattern of society as the national objective, was announced on April 30, 1956. Under this, industries specified in Schedule A will be the exclusive responsibility of the State, while Schedule B industries will be progressively State-owned, but private enterprise will be expected to supplement the efforts of the State in these fields. (The two Schedules are enumerated below). Future development of industries falling outside these Schedules will, in general, be left to private enterprise. Notwithstanding this demarcation, it will always be open to the State to undertake any type of industrial production.

*See 'India 1957' p. 289.

Schedule A Industries

Arms and ammunition and allied items of defence equipment; atomic energy; iron and steel; heavy castings and forgings of iron and steel; heavy plant and machinery required for iron and steel production, for mining, for machine tool manufacture and for such other basic industries as may be specified by the Central Government; heavy electrical plant including large hydraulic and steam turbines; coal and lignite; mineral oils; mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamonds; mining and processing of copper, lead, zinc, tin, molybdenum and wolfram; minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953; aircraft; air transport; railway transport; shipbuilding; telephones and telephone cables; telegraph and wireless apparatus (excluding radio receiving sets); generation and distribution of electricity.

Schedule B Industries

All other minerals except "minor minerals" as defined in Section 3 of the Minerals Concession Rules, 1949; aluminium and other non-ferrous metals not included in Schedule A; machine tools; ferro-alloys and tool steels; basic and intermediate products required by chemical industries such as the manufacture of drugs, dyestuffs and plastics; antibiotics and other essential drugs; fertilisers; synthetic rubber; carbonisation of coal; chemical pulp; road transport; sea transport.

REGULATION OF INDUSTRY

Consistently with the policy first announced in 1948, the Constitution was amended and the Industries (Development and Regulation) Act, 1951, was enacted. Under the Act, all new and existing undertakings and any substantial expansion of, and the manufacture of new articles by, existing undertakings were required to be licensed. The Government were authorised to examine the working of any industrial undertaking and to issue such directions as they considered necessary. If the undertaking continued to be mismanaged, the Government were empowered to take over its management or control. A Central Advisory Council consisting of the representatives of industry, labour, consumers and primary producers was to be constituted to advise the Government on all matters concerning the development and regulation of industries. Development Councils for individual or groups of industries were also to be set up.

By exercising these powers, the Government aim at securing a proper utilisation of the country's resources, a balanced development of large and small industries, and a proper regional distribution of the various industries. At present, 162 industries come within the scope of the Act. Under an amendment of the Act, precious metals, including gold, silver and their alloys, have been specially brought within its scope. Besides the Central Advisory Council of Industries, Development Councils have been set up for various industries. The following Councils functioned during the year : (i) inorganic chemicals, (ii) internal combustion engines, power-driven pumps, air compressors and blowers, (iii) instruments, bicycles and sewing machines, (iv) sugar, (v) light electricals, (vi) heavy electricals, (vii) drugs and pharmaceuticals, (viii) woollen textiles, (ix) art silk, (x) machine tools, (xi) non-ferrous metals and alloys, (xii) oils, soaps and paints, cosmetics and toiletries, (xiii) food processing, (xiv) organic chemicals, (xv) automobiles, automobile ancillary, transport vehicles, tractors and earth-moving equipment, (xvi) paper, pulp and allied industries, (xvii) leather and leather goods, and (xviii) glass and ceramics. The councils, consisting of representatives of industrial undertakings, labour, consumers and specialists, provide a forum for discussions on problems of the industries concerned. Their functions primarily aim at increasing efficiency and productivity and improv-

ing the services of the related industries. A number of panels and expert committees have been appointed from time to time to study various industries. During 1963, 976 new licences were issued under the Act. The highest priority is being given to measures for increasing output of defence-oriented industries. It was decided in 1959 that for industrial machinery as well as a number of other items, firms concerned might apply straightaway for import licences for capital goods and once these were granted, the Industries Act licence would follow as a matter of course. Industrial undertakings having fixed assets up to Rs. 25 lakhs are now exempted from licensing provisions.

For the development of important industries for which sufficient capital has not been forthcoming in the private sector, the Government give financial assistance either by granting loans on special terms or by participating in equity capital. The Directorate-General of Supplies and Disposals, the central purchase organisation of the Government of India, have been encouraging indigenous industry through their stores purchase policy. The purchases during 1962-63 totalling Rs. 405 crores contained only 13 per cent imported stores against an average of 41 and 24 per cent during the First and Second Plans, respectively. The value of indigenous stores purchased during 1962-63 amounted to Rs. 353.36 crores as against Rs. 75.9 crores in 1955-56 and Rs. 209.6 crores in 1961-62.

PRODUCTIVITY

Following the recommendations of a Productivity Delegation which visited Japan in October-November 1956, a National Productivity Council was set up in February 1958 as an autonomous body with representatives of Government, employers, labour and others. The object is to inculcate productivity consciousness in the country and apply the latest techniques of increasing productivity in industry, by promoting the setting up of local productivity councils in industrial centres and of regional productivity directorates manned by specialists. So far 46 local councils have been set up; six regional directorates at Bombay, Calcutta, Madras, Kanpur, Bangalore and Ludhiana have also been established. The Council has developed a number of training courses including those on material, production and personnel management and productivity techniques. India is a member of the Asian Productivity Organisation set up in May 1961 to promote mutual co-operation in this field.

INDUSTRIAL FINANCE

The Industrial Finance Corporation of India, established in July 1948, has been giving assistance in the form of advances and long-term loans to industrial concerns. The Act was amended in 1957* and again in December 1960 with a view to enlarging and diversifying the assistance provided by the Corporation. The 1960 amendment, among other things, empowered the Corporation directly to subscribe to the shares of industrial concerns. In March 1962, the Corporation secured a second loan of US \$ 20 million from the Agency of International Development (formerly DLF), raising the total sanctioned credit to \$ 30 million (Rs. 14.28 crores). Since its inception, up to the end of 1963, the total net financial assistance sanctioned by the Corporation amounted to Rs. 185.91 crores including a record sum of Rs. 40.14 crores during the year ended June 1963. Loans totalling Rs. 113.44 crores had been actually disbursed.

The State Financial Corporations** assist medium and small-scale industries which do not fall within the scope of the all-India corporation. The

*See also 'India 1961', p. 302.

**Fifteen State Financial Corporations have been set up. The Madras Industrial Investment Corporation is functioning as a State Financial Corporation in the State.

total amount of effective loans and advances sanctioned by them till the end of June 1963 was Rs. 59.30 crores, of which Rs. 42.27 crores had been disbursed.

During the calendar year 1962 the Industrial Credit and Investment Corporation of India, set up in January 1955 to assist industrial enterprises in the private sector, sanctioned assistance of Rs. 23.04 crores to 65 companies. Disbursement amounted to Rs. 10.53 crores including Rs. 5.92 crores in foreign currencies. Since its inception up to the end of 1963, the Corporation had sanctioned aggregate assistance of Rs. 83.20 crores to 248 companies, of which Rs. 38.79 crores (including Rs. 17.22 crores in foreign currencies) had been disbursed.

The Refinance Corporation for Industry Ltd. was set up in June 1958 to provide re-lending facilities against loans given by banks to industrial concerns for the purpose of increased production primarily in industries included in the Plan. Loans to be eligible for rediscount must be for periods between 3 and 7 years and of a medium-sized amount, not exceeding Rs. 50 lakhs. These facilities are available only to those industrial concerns whose paid-up capital and reserves do not exceed Rs. 2.5 crores. Refinance assistance sanctioned and disbursed till the end of January 1964 amounted to Rs. 47.78 crores and Rs. 29.05 crores, respectively. Up to February 24, 1964, the Central Government had granted the Corporation loans amounting to Rs. 24.50 crores.

The National Industrial Development Corporation was set up in 1954, to act, among other things, as an agency of the Government for the grant of special loans for the rehabilitation and modernisation of the cotton textile and jute industries and for expansion of machine tool units. Till the end of October 1963, loans amounting to Rs. 28.02 crores were sanctioned by the NIDC to these industries. Another Rs. 54.26 lakhs was sanctioned by it for the provision of indigenous machinery on short-term hire-purchase system. On recommendation by the Estimates Committee the Corporation has stopped to entertain fresh applications for loans, and only such cases as are in an advanced stage of processing are considered for loans.

The Film Finance Corporation Ltd. was set up in March 1960 (authorised capital Rs. 1 crore, paid-up capital Rs. 50 lakhs wholly subscribed by the Central Government). It provides financial assistance of up to Rs. 3.5 lakhs per film of good quality, at 9 per cent interest subject to a rebate of 2 per cent for prompt, regular repayments. Since its inception, up to the end of 1963, the Corporation had sanctioned 38 loans of a total amount of Rs. 1.04 crores.

The Unit Trust of India Act, 1963, came into force from February 1964. The Trust will have an initial fund of Rs. 5 crores contributed by the Reserve Bank, the State Bank, the LIC and financial institutions giving loans to industry. Managed by a board of trustees comprising representatives of these bodies, the Trust aims at encouraging savings by providing facilities to various classes of investors for investment in units of the face value of Rs. 10 to Rs. 100, in shares and other securities. Not less than 90 per cent of the net income on the investment will be distributed to the unit holders. The units will be put on sale from July 1, 1964.

The Government assist the private sector by facilitating the import of essential raw materials and basic intermediates, offering tax concessions and protecting new industries in the first few years. The statutory Tariff Commission, established in January 1952 in place of the previous non-statutory Tariff Board, have been reviewing the progress of protected industries and examining new cases for protection.

Efforts have been made to secure technical help from the industrially advanced countries either under the international technical assistance schemes or through direct negotiations. (See Chapter XXVII 'India and the World').

Foreign Capital

To supplement the capital resources and know-how for rapid industrial development, the Government have invited foreign assistance in desirable cases. The policy in regard to foreign capital was enunciated in the Industrial Policy Resolution of April 1948, and in the Prime Minister's statement in the Constituent Assembly in 1949, which laid down that :

- (i) the participation of foreign capital and enterprise should be carefully regulated in the national interest by ensuring that major interest in ownership and effective control should, save in exceptional cases, always be in Indian hands and that the training of suitable Indian personnel for the purpose of eventually replacing foreign experts will be insisted upon in all such cases;
- (ii) there will be no discrimination between foreign and Indian undertakings in the application of the general industrial policy;
- (iii) reasonable facilities will be given for the remittance of profits and repatriation of capital consistent with the foreign exchange position of the country;
- (iv) in the event of nationalisation, fair and equitable compensation will be paid.

According to a Reserve Bank study*, the total outstanding foreign investments in the private sector (other than banking) amounted to Rs. 690.5 crores at the end of 1960, compared to Rs. 610.5 crores for 1959. Of the 1960 total, private sources accounted for Rs. 566.4 crores and official sources for the balance of Rs. 124.1 crores. The largest single source of the official capital was IBRD, accounting for Rs. 78.1 crores or nearly 63 per cent. Countrywise, UK's share at Rs. 446.4 crores, or 65 per cent, was the largest; the US investments accounted for Rs. 113 crores or 16 per cent.

Inflow of foreign investment in the private sector during 1960 was Rs. 78.4 crores (net of capital repatriation and revaluation of assets). Of the total, private sources accounted for Rs. 53.3 crores, as against Rs. 11 crores in 1959, the bulk being investment in the petroleum and manufacturing fields. Net inflow from official sources was Rs. 25.1 crores. Inflow from UK was Rs. 44.5 crores, USA Rs. 28.5 crores and others Rs. 5.4 crores.

India's foreign liabilities in the official sector during 1960 amounted to Rs. 1,205 crores and in the banking sector Rs. 73 crores. Together with private (non-banking) liabilities of Rs. 690.5 crores, the liabilities totalled nearly Rs. 1,969 crores (Rs. 1,615 crores in 1959). Her foreign capital assets in the official sector in 1960 were Rs. 585 crores (including Rs. 300.8 crores of Pakistan's partition debt to India) and in the banking sector Rs. 59 crores, or a total of Rs. 644 crores. India's total investment liabilities thus worked out to Rs. 1,325 crores in 1960 (Rs. 911 crores in 1959).

DEVELOPMENT OF INDUSTRIES

Early Stages

The history of organised industry in India can be traced to 1854 when the real beginnings of the cotton mill industry were made in Bombay with predominantly Indian capital and enterprise. The foundations of jute industry were laid near Calcutta in 1855, mostly with foreign capital and enterprise. Coalmining had also progressed around this time. These were the only major industries which had developed substantially before the first world war. During and after World Wars I and II, new conditions were created and somewhat more liberal policies adopted by the authorities, such as the discriminating protection policy introduced in 1922, which gave impetus to industrial development. Several industries rapidly expanded and a

*See "Reserve Bank of India Bulletin", October 1962.

number of new industries came up, such as steel, sugar, cement, some engineering, glass, industrial chemicals, soap, vanaspati, and so on. But their production was neither adequate in quantity for meeting even the low level of internal demand nor diversified in character.

Progress during First and Second Plans

During the period of the First and Second Plans (1951-52 to 1960-61), the growth and diversification of industry were remarkable and particularly so in the five years of the Second Plan. Three new steel works, each of 10 lakh tons capacity, were completed in the public sector and two existing steel works in the private sector doubled so as to bring their ingot capacity to 20 lakh and 10 lakh tons respectively. Foundations were laid of heavy electrical and heavy machine tools industries, heavy machine building and other branches of heavy engineering, and the production of machinery for the cement and paper industries started for the first time. In chemical industries the advance was on a wide front, leading not only to large units and greatly increased output of basic chemicals such as nitrogenous fertilizers, caustic soda, soda ash and sulphuric acid, but also to the manufacture of a number of new products: urea, ammonium phosphate, penicillin, synthetic fibres, industrial explosives, polyethylene, newsprint, dyestuffs and so on. The output of many other industries increased substantially: bicycles, sewing machines, telephones, electrical goods, textile and sugar machinery. New skills were learnt by the workers and a large and growing class of industrial managers came into being. Organised industrial production practically doubled in these ten years; the index of industrial production rose from 100 in 1950-51 to 194 in 1960-61. New industrial townships and various factories sprang in the environs of the main cities of the country.

At the same time there were some large shortfalls. The combined output of the new steel works was only 6 lakh tons in 1960-61 as against the target of 20 lakh tons. The Tata Iron and Steel Works' production also fell short of the target set for the Second Plan period. The expansion of the Government Sindri fertilizer factory and the private sector ammonium chloride project at Varanasi was not completed till 12 to 18 months after the scheduled dates. The three new fertilizer plants in the public sector at Nangal, Neyveli and Rourkela planned to be more or less in full production in 1960-61 were all delayed by one or two years. The delay in their case, as also in that of the Heavy Electrical Project at Bhopal, was mainly due to foreign exchange difficulties. The heavy machinery, the mining machinery and the foundry forge projects, which should by now have been far advanced will only begin to yield output at the end of the Third Plan. The project for the manufacture of organic intermediates was delayed due to difficulties in concluding negotiations with overseas collaborators. The experience of the Second Plan has shown that the gestation period of a project, especially in the case of heavy engineering industries, is generally longer than presumed. This highlights the importance of advance planning.

Targets of capacity and production in most cases were, however, approximately fulfilled and in some cases, for example, power-driven pumps, diesel engines, electric motors, ACSR cables, electric fans, radio receivers and sugar, the targets were exceeded.

The actual cost of many projects was more than what was envisaged when the Second Plan was drawn up, often owing to lack of experience in project engineering. The importance of more accurate estimates has been emphasised in the Third Plan. Consultant organisations which could correctly advise in this respect have been springing up in this country and will be an advantage in future.

Dispersal of industry was effected by giving preference in the location of public sector projects to relatively backward areas whenever possible.

Similarly in the licensing of private sector projects the claims of under-developed regions were generally kept in view to the extent possible. The overall fixed investment on public sector projects during the Second Plan (1956-61) came to about Rs. 770 crores as against the original estimate of Rs. 560 crores. For the private sector, the corresponding investment figures are Rs. 850 crores and Rs. 685 crores respectively.

In spite of this large investment of Rs. 1,620 crores (over 30 per cent above the Plan estimate of about Rs. 1,244 crores), the physical targets set under the Second Plan are broadly estimated to have been achieved to the extent of only about 85 to 90 per cent. The wide gap between the rather high target originally set for the cement industry and the capacity actually achieved accounts for a high proportion of the overall shortfall in the physical performance.

Development Programme under Third Plan

The main emphasis in the Third Plan is on the establishment of basic capital and producer goods industries—with special emphasis on machine building programmes—and also the acquisition of the related skills, technical know-how and designing capacity, so that in the following Plan periods the growth of the economy will become self-sustaining and increasingly independent of outside aid. The priorities have been laid down as follows :

- (i) completion of unimplemented or deferred Second Plan projects,
- (ii) expansion and diversification of capacity of the heavy engineering and machine building industries, castings and forgings, alloy tool and special steels, iron and steel and ferro-alloys and step-up of output of fertilizers and petroleum products;
- (iii) increased production of major basic raw materials and producer goods like aluminium, mineral oils, dissolving pulp, basic organic and inorganic chemicals and intermediates inclusive of products of petro-chemical origin; and
- (iv) increased production from domestic industries of commodities required to meet essential needs like essential drugs, paper, cloth, sugar, vegetable oils and housing materials.

The development programmes for industries and minerals envisaged under the Third Plan entail an outlay of about Rs. 2,993 crores. The foreign exchange component is placed at about Rs. 1,338 crores. The break-up is as follows :

TABLE 140
OUTLAY ON INDUSTRIES (THIRD PLAN)

(in crores of rupees)

	Public sector		Private sector		Both sectors	
	Total	Foreign exchange	Total	Foreign exchange	Total	Foreign exchange
New investment						
Mineral development ..	478	200	60	28	538	228
Industrial development ..	1,330	660	1,125	450	2,455	1,110
TOTAL ..	1,808	860	1,185	478	2,993	1,338
Replacement ..	—	—	150	50	150	50

The fixed investment of Rs. 1,808 crores for industries and minerals in the public sector shown in the table above does not include (i) assistance to plantation industries, which do not strictly fall within the scope of manufacturing industries; (ii) the cost of the construction subsidy given to

Hindustan Shipyard; (iii) programmes of the National Productivity Council and the Indian Standards Institution and expenditure on the extension of the metric system of weights and measures; (iv) assistance to the private sector through the National Industrial Development Corporation (NIDC); and (v) direct loans and State participation in private undertakings.

Including the above, the overall cost is about Rs. 1,882 crores, whereas the provision that it was possible to make for them was only Rs. 1,520 crores (Rs. 1,450 crores at the Centre and Rs. 70 crores in the States). With more detailed information now available on the basis of project reports, a general increase in construction costs and enlargement of the scope of some projects, the costs as estimated in *The Third Plan—Mid-term Appraisal* would amount to Rs. 1,630 crores for industrial and Rs. 662 crores for mineral development (total Rs. 2,292 crores compared to the original estimate of Rs. 1,808 crores). Public sector investment is expected to reach the level of Rs. 1,225 crores under industries and Rs. 529 crores under minerals (total of Rs. 1,754 crores compared to original allocation of Rs. 1,520 crores). On this basis, there will be spillover of Rs. 405 crores in the industries and Rs. 133 crores in the minerals sector. Private sector programmes have also changed in content and priority, but the increases over the original estimates are difficult of assessment.

Tables 141 and 142 show the mineral and industrial projects in the public sector (Central Government), projected investment (including foreign exchange component) in each and the targets of capacity to be attained, as originally envisaged in the Third Plan.

TABLE 141
MINERAL PROJECTS IN THE PUBLIC SECTOR (CENTRAL GOVERNMENT)
THIRD PLAN*

Name of scheme	Total outlay (Rs. crores)	Foreign exchange component (Rs. crores)
A. Projects under execution and carried over from the Second Plan		
<i>Coal</i>		
Coal programme of National Coal Development Corporation	8.00	—
Washeries at Bhojudih, Patherdih and Dugda	7.50	4.00
	15.50	4.00
<i>Oil</i>		
OIL INDIA		
Crude pipe line	8.00	—
Share capital in Oil India	1.42	—
	9.42	—
<i>Lignite</i>		
NEYVELI LIGNITE PROJECT		
Mining scheme	3.29	1.30
Housing	3.00	—
	6.29	1.30
<i>Iron ore</i>		
Kiriburu	6.00	3.93
TOTAL ..	37.21	9.23

*For Third Plan targets of capacity and production for selected categories of industries and minerals in general, see Table 173, pp. 305-308, of 'India 1962'.

TABLE 141 (concl.)

Name of scheme							Total outlay (Rs. crores)	Foreign exchange component (Rs. crores)
B. New projects for which external credits are already assured, wholly or partly								
<i>Coal</i>								
Additional coal (1.7 crore tons) from National Coal Development Corporation							57.00*	28.00
Singareni expansion (30 lakh tons)							20.00	6.00
Maintenance of production							16.00	10.00
Central workshop							8.00	2.70
Drills for prospecting							2.00	1.40
Advance action for the Fourth Plan							10.00	7.00
Central ropeways							16.00	8.00
Additional washing capacity for coking coal							20.00	11.30
							149.00	74.40
<i>Oil</i>								
Oil exploration							115.00	53.53
<i>Iron ore</i>								
Bailadila iron ore project							17.00	8.55
<i>Copper projects</i>								
Khetri copper project							10.00	6.36
Daribo copper project							2.50	
							12.50	6.36
TOTAL							293.50	142.84
C. Other projects								
<i>Coal</i>								
Non-coking coal washeries							12.00	7.00
<i>Neyveli lignite project</i>								
Expansion of mine output							3.80	1.45
<i>Oil</i>								
Oil distribution programme							10.00	—
Oil India							8.00	—
Crude oil pipe lines							4.00	—
Oil products pipe lines							37.00	10.00
TOTAL							59.00	10.00
<i>Other minerals</i>								
Sikkim copper project							2.50	1.30
Panna diamond project							1.50	0.60
Manganese ore beneficiation plants							5.00	1.00
Project for sulphur from pyrites							5.00	2.50
Kolar gold mines							1.50	0.84
Hutti gold mines							0.50	0.20
Expansion of Kiriburu							6.00	3.00
Uranium mining, fabrication and plutonium extraction plant							24.00	8.17
TOTAL							46.00	17.61
<i>Surveys</i>								
GSI expansion							10.00	3.19
IBM expansion							5.00	1.89
							15.00	5.08
GRAND TOTAL							466.51	193.21

*In addition, some further amount may be needed for deep and gassy mines.

TABLE 142
INDUSTRIAL PROJECTS IN THE PUBLIC SECTOR (CENTRAL GOVERNMENT)—THIRD PLAN

Name of scheme	Location	Total investment (Rs. crores)	Foreign exchange component (Rs. crores)	Capacity in 1965-66 (final capacity in case of expansion)
A. Projects under execution and carried over from Second Plan				
Completion of the three steel plants ..	Rourkela } Bhilai } Durgapur }	50.0	20.0	30 lakh tons of steel ingots and 7 lakh tons of pig iron for sale
Rourkela fertiliser factory ..	Rourkela }			1.20 lakh tons of nitrogen
Heavy machinery plant ..	Ranchi }			45,000 tons of finished machinery
Foundry forge shop ..	Ranchi }	80.0	55.0	94,000 tons of castings and forgings
Mining machinery plant ..	Durgapur }			30,000 tons of mining machinery
Heavy electrical plant ..	Bhopal }	16.0	7.0	Rs. 12.5 crores worth of electrical equipment
Drug projects				
(a) synthetic drugs plant ..	Santnagar (Andhra Pradesh) }			Rs. 6.4 crores worth of drugs
(b) antibiotics plant ..	Rishikesh (Uttar Pradesh) }	30.0	15.0	Rs. 25.8 crores worth of antibiotics
(c) phyto-chemicals plant ..	Munnar (Kerala) }			Rs. 77 lakhs worth of phyto-chemicals
(d) surgical instruments plant ..	Guindy (Madras) }			Rs. 2.8 crores worth of instruments
Organic intermediates plant ..	Near Panvel (Maharashtra) }	11.0	6.0	25,000 tons of organic intermediates
Expansion of Hindustan Antibiotics ..	Pimpri (Maharashtra) }	0.5	---	45,000 kg. of streptomycin and 1.5 tons of tetracyclines
Trombay fertiliser factory ..	Trombay (Maharashtra)	25.0	13.0	90,000 tons of nitrogen
Naharkatiya fertiliser factory ..	Naharkatiya (Assam)	12.0	7.0	32,500 tons of nitrogen
Neyveli fertiliser factory ..	Neyveli (Madras)	15.68	11.56	70,000 tons of nitrogen
Briquetting and carbonisation plant ..	Neyveli (Madras)	13.84	8.61	3.8 lakh tons of carbonised briquettes
Neyveli thermal power plant ..	Neyveli (Madras)	9.67	5.86	250 mw
Nunmati oil refinery ..	Nunmati (Assam)	8.5	4.9	7.5 lakh tons of crude oil
Barauni oil refinery ..	Barauni (Bihar)	23.0	7.5	20 lakh tons of crude oil
		295.19	161.5	
B. New Projects for which external credits are already assured, wholly or partly				
Expansion of heavy machinery plant ..	Ranchi	14.0	11.0	80,000 tons of finished machinery
Expansion of foundry forge ..	Ranchi	10.0	5.5	1.53 lakh tons of castings and forgings
Expansion of mining machinery plant ..	Durgapur	15.0	10.0	45,000 tons of mining machinery

TABLE 142 (contd.)

Name of scheme	Location	Total investment (Rs. crores)	Foreign exchange component (Rs. crores)	Capacity in 1965-66 (final capacity in case of expansion)
Second and third heavy electrical projects	Ranipur (Hardwar) and Ramachandrapuram (Hyderabad)	69.0	45.0	Scope yet to be finally decided in the case of the third project
Heavy machine tool project	Ranchi	11.0	9.0	Rs. 3-4 crores worth of machine tools
Precision instruments projects	Kotah and Pulghat	8.0*	6.0	Rs. 20 crores worth of instruments
Ophthalmic glass project	Durgapur	2.6	2.0	300 tons of ophthalmic glass
Raw film project	Ootacamund	8.0	5.0	63 lakh sq. metres of raw film, photographic paper, etc.
Watch factory	Bangalore	2.5	1.5	3.6 lakh watches
Expansion of Bhilai steel plant	Bhilai	138.0	56.0	25 lakh tons of steel ingots and 3.6 lakh tons of pig iron for sale
Expansion of Durgapur steel plant	Durgapur	56.0	27.0	16 lakh tons of steel ingots and 3 lakh tons of pig iron for sale
Expansion of Rourkela steel plant	Rourkela	90.0	50.0	18 lakh tons of steel ingots
Expansion of Hindustan Machine Tools	Bangalore	3.0	2.0	Rs. 7 crores worth of machine tools
Basic refractories project	Bhilai	3.0	1.5	Scope yet to be decided
New machine tool works in Punjab	Pinjore	5.0	3.0	1,000 machine tools (Rs. 3.5 crores)
Gujarat oil refinery	Koyali	30.0	15.0	20 lakh tons of crude oil
Expansion of Praga Tools	Secunderabad (Andhra Pradesh)	1.0	0.5	Rs. 1 crore worth of machine tools
Heavy structural works	Not yet decided			25,000 tons of heavy structurals per annum
Heavy plate and vessel works	Not yet decided	6.0	4.0†	12,500 tons per annum
Gorakhpur fertiliser factory	Gorakhpur	18.0	8.0	80,000 tons of nitrogen
Security paper mill	Hoshangabad (Madhya Pradesh)	5.5	4.0	1,500 tons of security paper
Expansion of Hindustan Cables	Rupnarainpur (West Bengal)	3.5	1.2	2,000 miles of dry core cables and 500 miles of plastic insulated city cables on double shift basis
		499.1	267.2	

*According to later estimates the cost would be Rs. 12 crores.

†According to later estimates these projects will cost Rs. 12 crores and will need foreign exchange expenditure of Rs. 7 crores.

TABLE 142 (concl.)

Name of scheme	Location	Total investment (Rs. crores)	Foreign exchange component (Rs. crores)	Capacity in 1965-66 (final capacity in case of expansion)
	C. Other	Projects		
Bokaro steel project	Bokaro	200.0	100.0	10 lakh tons of steel ingots and 3.5 lakh tons of pig iron for sale
Alloy and tool steel plant	Durgapur	50.0	20.0	48,000 tons of finished products
Expansion of Bhopal Heavy Electrical Plant	Bhopal	19.0	8.0	Rs. 25 crores worth of electrical equipment
Expansion of Hindustan Shipyard (expansion and subsidy)	Visakhapatnam	10.0	1.5	
Dry dock project of Hindustan Shipyard	Visakhapatnam	2.0	0.5	
Second shipyard	Cochin	20.0	5.0	
Expansion of FACT	Alwaye (Kerala)	8.0	5.6	60,000 tons of nitrogen
Expansion of Nepa mills	Nepanagar (Madhya Pradesh)	4.0	3.0	60,000 tons of newsprint
Salt development..	Not yet decided	3.0	0.8	Scope yet to be decided
Heavy compressors and pumps project	Not yet decided	15.0	10.0	20 lakh bearings
Ball and roller bearings project	Not yet decided	8.0	6.0	Scope yet to be decided
Additional capacity for machine tools	Not yet decided	15.0	10.0	
Second heavy structural works	Not yet decided	3.0	1.5	
Second plate and vessel works	Not yet decided			
Marine diesel engine factory	Not yet decided			
Expansion and modernisation of the Government alkalioid factory	Gazipur (Uttar Pradesh)	0.4	—	
Lubricating oil plant	..	12.0	6.0	1 lakh tons of HVI lubricants
Low temperature carbonisation plants	..	22.0	15.0	22 lakh tons of coal
Neyveli lignite high temperature carbonisation plant and connected facilities for pig iron production	Neyveli (Madras)	25.0	13.0	10 lakh tons of lignite
Townships	At project sites	50.0	—	
		466.4	205.9	
TOTAL		1,260.69	634.5	

INDUSTRIAL PRODUCTION

Production in selected industries in different years since 1950-51 is given in Table 143. The index numbers of industrial production (base 1956=100) for 1951, 1955 and 1960 to 1963 are given in Table 144. The general index for January-October 1963 at 161.4 was 8.8 per cent. above the index figure of 148.3 for the corresponding period of 1962.

TABLE 143
PRODUCTION IN SELECTED INDUSTRIES

	1950-51	1955-56	1960-61	1961-62	1962-63
I. Mining :					
1. Coal (lakh tonnes) ..	3,28	3,90	5,55	5,52	6,38
2. Iron ore (lakh tonnes) ..	30	43	1,09	1,28	1,33
II. Metallurgical Industries :					
3. Pig iron (lakh tonnes) ..	16	18	43	51	61
4. Steel ingots (lakh tonnes)	15	17	34	43	54
5. Finished steel (lakh tonnes)	10	13	24	30	40
6. Steel castings ('000 tonnes)	—	15	35	41	44
7. Aluminium (virgin metal) ('000 tonnes)	4.0	7.4	18.5	19.7	42.8
8. Copper (virgin metal) ('000 tonnes)	7.1	7.6	9.0	9.2	9.7
III. Mechanical Engineering Industries :					
9. Machine tools (lakh rupees)	30	80	7,20	8,50	11,50
10. Railway wagons ('000 nos.)	—	15.3*	9.0	11.4	15.3
11. Automobiles (total) ('000 nos.)	16.5	25.3	54.8	54.6	54.8
(i) Commercial vehicles ('000 nos.)	8.6	9.9	28.2	25.4	26.5
(ii) Passenger cars, etc. ('000 nos.)	7.9	15.4	26.6	29.2	28.3
12. Motor cycles and scooters ('000 nos.)	—	0.9**	17.6	19.1	23.6
13. Power driven pumps ('000 nos.)	35	37	1,05	1,29	1,31
14. Diesel engines (stationary) ('000 nos.)	5.5	10.4	43.2	43.0	45.2
15. Bicycles ('000 nos.)	99	5,13	10,63	10,44	11,06
16. Sewing machines ('000 nos.)	33	1,11	2,97	3,23	3,39
IV. Electrical Engineering Industries :					
17. Power transformers (lakh k.v.a.)	1.8	6.3	13.9	19.8	24.1
18. Electric motors ('000 h.p.)	99	2,72	7,28	8,68	10,34
19. Electric fans (lakh nos.)	2.0	2.9	10.6	10.8	11.8
20. Electric lamps (lakh nos.)	1,50	2,50	4,35	4,88	6,17
21. Radio receivers ('000 nos.)	54	1,02	2,80	3,48	3,61
22. Electric cables and wires	—	9.2	23.7	22.1	30.6
(i) Aluminium conductors ('000 tonnes)	—	9.2	23.7	22.1	30.6
(ii) Bare copper conductors ('000 tonnes)	5.0	8.7	10.1	7.1	4.2

*Provisional.

**Relates to calendar year.

TABLE 143 (concl'd.)

	1950-51	1955-56	1960-61	1961-62	1962-63
V. Chemical and Allied industries :					
23. Ammonium sulphate ('000 tonnes) ..	47	4.00	4.02	3.94	4.23
24. Superphosphate ('000 tonnes) ..	57	71	3.17	3.78	4.70
25. Sulphuric acid ('000 tonnes) ..	1.01	1.67	3.60	4.35	4.83
26. Soda ash ('000 tonnes) ..	46	82	1.47	1.81	2.36
27. Caustic soda ('000 tonnes) ..	12	36	99	1.23	1.30
28. Paper and paperboards ('000 tonnes) ..	1.16	1.90	3.49	3.71	4.01
29. Rubber tyres :					
(i) Automobile tyres (lakh nos.) ..	n.a.	9.0	14.9	15.9	17.5
(ii) Bicycle tyres (lakh nos.) ..	n.a.	58.0	1,11.5	1,13.3	1,24.3
30. Cement (lakh tonnes) ..	27	47	79	83	89
31. Refractories ('000 tonnes) ..	2,37	2,93	5,59	6,02	6,74
32. Petroleum products (refined, lakh tonnes) ..	4	37	61	62	69
VI. Textile Industries :					
33. Jute textiles ('000 tonnes) ..	8.37	10.71	10.71	10.02	12.02
34. Cotton yarn (crore kg.) ..	53.4	74.4	80.1	87.3	85.7
35. Cotton cloth (total) (crore metres) ..	421.5	626.0	673.8	711.5	692.8
(i) Mill sector (crore metres) ..	340.1	466.5	464.9	468.6	449.8
(ii) Decentralised sector (crore metres) ..	81.4	159.5	208.9	242.9	243.0
36. Rayon* yarn ('000 tonnes) ..	2.1	13.5	43.8	52.3	62.3
37. Woollen manufactures :					
(i) Woollen and worsted yarn (lakh kg.) ..	87	98	1,29	1,58	1,96
(ii) Woollen and worsted fabrics (lakh metres) ..	n.a.	1,37	1,33	1,45	1,89
VII. Food Industries :					
38. Sugar (Nov.-Oct.) ('000 tonnes) ..	1.1	1.9	3.0	2.7	2.2
39. Tea (crore kg.) ..	27.7	29.9	31.8	34.8	34.3
40. Coffee ('000 tonnes) ..	21.0	29.0	54.1	66.6	49.0
41. Vanaspati ('000 tonnes) ..	1,55	2,80	3,55	3,36	3,66
VIII. Electricity (Generated) (billion kwh) ..					
	5.3	8.8	17.0	19.8	22.1

TABLE 144
INDEX NUMBERS OF INDUSTRIAL PRODUCTION
(Base : 1956=100)

	1951	1955	1960	1961	1962	1963 (Jan.-Oct.)**
<i>General Index</i> ..	73.0	92.3	130.2	139.4	150.0	161.4†
Mining and quarrying ..	87.0	97.1	137.2	147.3	161.3	175.8
Food manufacturing † ..	79.6	93.3	117.4	129.3	127.4	117.9
Cigarettes ..	81.6	86.8	140.6	150.0	155.7	152.3
Cotton textiles ..	79.1	95.2	102.9	109.0	109.6	111.7
Woollen textiles ..	70.7	83.2	101.3	107.3	138.4	166.4

*Includes viscose yarn, staple fibre and acetate yarn.

**Provisional.

†Seasonally adjusted.

TABLE 144 (concl'd.)

	1951	1955	1960	1961	1962	1963 (Jan.-Oct.)
Synthetic fibres	58.1	81.6	146.8	166.7	156.0	199.6
Jute manufactures	78.8	93.5	99.3	89.6	109.8	116.7
Footwear (leather)	91.5	86.3	144.0	166.0	180.4	218.2
Wood and cork except furniture	55.3	87.7	147.8	150.2	162.4	189.9
Paper and paper products	66.5	95.9	173.4	181.9	190.6	221.8
Leather and fur products, except footwear and other wearing apparels	109.5	93.1	167.1	115.6	125.2	150.1
Rubber products	75.4	92.0	141.3	157.4	169.4	185.1
Chemicals and chemical products	72.9	96.3	149.1	173.0	183.9	217.5
Petroleum products	6.4	77.9	148.0	159.4	169.0	194.4
Non-metallic mineral products	64.4	87.5	168.1	180.8	191.2	199.9
Basic metals	83.5	96.6	183.1	184.3	227.9	259.7
Metal products	54.4	96.5	105.9	152.3	179.1	195.5
Machinery, except electrical machines	45.2	83.3	236.7	264.0	285.2	351.7
Electrical machinery, apparatus, appliances and supplies	43.6	71.9	175.9	183.0	211.2	235.5
Transport equipment	46.1	73.1	119.4	130.8	144.5	143.8
Electricity	60.9	88.1	171.0	198.8	223.4	253.3

PRINCIPAL INDUSTRIES

Cotton Textiles

The growth of the cotton textile industry in the pre-independence period is shown in the following table.

TABLE 145
GROWTH OF COTTON TEXTILE INDUSTRY (1879-1947)

Year	Number of spindles (thousand)	Number of looms (thousand)	Production (lakh lbs.)	
			Yarn	Piecegoods
1879-80	14.08	13.3	—	—
1889-90	29.35	22.1	—	—
1901	48.41	40.5	57.30	12.00
1911	60.95	85.8	62.50	26.70
1921	72.78	133.5	69.40	40.30
1931	90.78	175.2	96.60	67.20
1941	1,00.26	2,00.2	157.70	109.30
1947	1,03.54	2,03.0	129.60	376.20

(lakh yds.)

The production of cotton yarn and cloth since 1950 is shown in the table below.

TABLE 146
PRODUCTION OF COTTON YARN AND CLOTH

Year	Cotton yarn (lakh lbs.)	Cotton cloth (lakh yds.)
1950	117.48	366.70
1955	163.08	509.40
1961	188.75	512.70
1962 (provisional)	189.29	498.83

At the beginning of 1961, nearly Rs. 122 crores were invested in the industry which employed about 8.9 lakh workers. At present there are 510

cotton textile (219 spinning and 291 composite) mills in India, with 141.2 lakh spindles and about 2 lakh looms. The Third Plan provides for installation of 40 lakh spindles, out of which 37.6 lakh have already been licensed.

The 1963 production of cotton cloth in all sectors (handlooms and power-looms account for a little over one-third of total production) was 744.3 crore metres, compared to 700.8 crore metres in 1962. Output of yarn in 1963 was 88.9 crore kg. as against 86 crore kg. in 1962.

The Government have been carrying out, since 1955, a survey of the industry both from the technical and financial points of view to find out the requirements of modern equipment and machinery. The National Industrial Development Corporation assistance to the industry is based on these data.

Jute

The early development of the jute industry is shown in Table 147.

TABLE 147
GROWTH OF JUTE INDUSTRY (1879—1947)

Year	Number of mills	Authorised capital (Rs. crores)	Number of looms (thousand)	Number of spindles (thousand)
1879-80 to 1883-84 (average) ..	21	2.71	5.5	88
1899-1900 to 1903-04 (average) ..	36	6.80	16.2	3.35
1909-10 to 1913-14 (average) ..	60	12.09	33.5	6.92
1925-26	90	21.35	50.5	10.64
1930-31	100	23.61	61.8	12.25
1937-38	105	24.89	52.4	11.08
1946-47	106	—	66.0	12.95

According to the Annual Survey of Industries, 1960, there were 95 jute mills in India out of which 94 submitted returns. These employed total production capital of Rs. 68.25 crores (Rs. 38.47 crores of fixed capital). The number of persons employed in the industry was 2,28,677 including 2,12,582 workers. The following table shows the production of jute goods since 1947.

TABLE 148
PRODUCTION OF JUTE MANUFACTURES

(in thousand tons)						
Year*	1947	1950	1955	1961 (provisional)	1962	1963
Production**	10.52	8.36	10.27	9.70	12.36	12.88

The 1962-63 jute season was one of the best recorded in recent years; the carry-over from 1961-62 was 27 lakh bales and the crop 80 lakh bales and the industry achieved the Third Plan target production of 13 lakh tonnes. The steady demand for jute goods was particularly responsible for the high level of production. During 1963, exports amounted to 9.11 lakh tonnes valued at Rs. 160 crores as compared to 8.68 lakh tonnes valued at Rs. 150 crores in 1962.

Modernisation up to spinning stage has been almost completed. About 89 per cent of the fine-side and almost 100 per cent of the coarse-side spindlage required to feed the hessian and sacking looms on single-shift basis have been modernised. A self-financing scheme has been introduced to enable the industry to complete modernisation and broad-loom expansion and build up necessary potential for additional production.

*Figures relate to the period July-June which is the jute year.

**Figures for 1961 onwards are in metric tons.

Sugar

The rapid development of the sugar industry under protection in the early thirties and thereafter is shown below.

TABLE 149
GROWTH OF SUGAR INDUSTRY

Year (Nov.-Oct.)	1931-38	1938-39	1945-46	1950-51	1955-56
No. of Mills	32	132	138	138	143
Production ('000 tons)	1.60	6.42	9.23	11.01	18.62

There were 175 mills in 1960-61, and the production was 30.29 lakh tonnes. The 1962-63 output was lower at 21.52 lakh tonnes, largely because of a poor sugarcane crop. Internal consumption at 24.88 lakh tonnes in 1962-63 was nearly a lakh tonnes less than in 1961-62. Exports, however, were higher at 4.79 lakh tonnes in 1963 as compared to 3.73 lakh tonnes in 1962. Production target for 1963-64 was laid down at 33 lakh tonnes. The capacity of the industry was augmented to 34.14 lakh tonnes by licensing the establishment of 72 new factories including 54 co-operatives, and expansion of 120 existing units. Incentives have also been offered in the form of higher cane price to growers and rebate in excise duty on excess production.

Cement

Manufacture of Portland cement started in Madras in 1904. The real beginning on a large scale took place with the formation of three companies in 1912-13. At the end of 1961, the annual installed capacity was 94.7 lakh tonnes which had risen to 101.2 lakh tonnes at the end of 1963. The 1963 production at 93.9 lakh tonnes was 9.4 per cent more than in 1962. The demand has exceeded the supply, which was further accentuated by the national emergency. The Cement (Quality Control) Order was issued in 1962 to prevent possible adulteration of cement. The growth of the industry is traced below.

TABLE 150
PRODUCTION OF CEMENT

Year	1914	1918	1930	1947	1950-51	1955-56	1960-61	1961-62	1962-63
Production (lakh tonnes)	0.1	0.85	5.77	14.70	27	47	79	83	89

The targets of installed capacity and production at the end of the Third Plan have been set at 152.4 lakh m. tons and 132.1 lakh m. tons respectively.

Paper and Paper-Board

The production of machine-made paper in India dates back to 1870, when the Bally Mills were established near Calcutta. During World War II, the number of mills increased to 15 and production reached 1,03,884 lakh tons (1944). Rapid progress has been made since 1950. The installed capacity has risen to 5.02 lakh tonnes. The total capacity licensed so far is 10.97 lakh tonnes against the Third Plan production target of 7 lakh tons. However the capacity available at the end of the Plan is estimated at 6.8 lakh tonnes. Seven units of 48,350 tonnes capacity commenced production in 1963. Production of grease-proof paper started in 1959.

Paper and paper-board production in 1950 was 1.09 lakh tons. By 1956, it had gone up to 1.97 lakh tonnes, by 1961 to 3.64 lakh tonnes, by 1962 further to 3.88 lakh tonnes and by 1963 to 4.70 lakh tonnes.

The first newsprint mill in India, the National Newsprint and Paper Mills Limited, Nepanagar (Madhya Pradesh), started as a private venture

in 1947 and the responsibility for its management was taken over by the Madhya Pradesh Government in 1948. After its reorganisation in 1958, the Government of India and the Government of Madhya Pradesh now hold shares of Rs. 2.55 crores and Rs. 1.70 crores respectively. Total authorised and issued capital is Rs. 5 crores. The mill went into production in January 1955. It has an installed capacity of 30,000 tonnes, which is proposed to be increased to 75,000 tonnes. Two private units with a total capacity of 90,000 tonnes have also been licensed. The Third Plan target is an installed capacity of 1.50 lakh tonnes. Output during 1955-56 was 3,455 tons and in 1960-61 and 1961-62 it had risen to 23,398 and 25,279 tonnes respectively. The 1962-63 production amounted to 26,515 tonnes, while the 1963-64 output is expected to be a little more than the rated capacity of 30,000 tonnes.

Iron and Steel

The earliest attempt at the manufacture of iron and steel by modern methods, made in 1830 in South Arcot, failed. In 1874 the Barakar Iron Works started work on the Jharia coalfields; the works were acquired by the Bengal Iron and Steel Company in 1889. Production amounted to 35,000 tons in 1900. The Tata Iron and Steel Company, established by the late Jamshedji Tata in 1907 at Sakchi, Bihar, first produced pig iron in 1911 and steel in 1913. The two other important manufacturers were the Indian Iron and Steel Company (formed in 1908 at Hirapur near Asansol, Bengal) and the Mysore State Iron Works (now Mysore Iron and Steel Ltd.), started at Bhadravati in 1923. By 1939, the production of steel and pig iron was over 8 lakh and 18 lakh tons respectively. World War II gave an impetus to the industry. By 1950, production had risen to 15 lakh tons of pig iron and over 10 lakh tons of steel.

The table below shows the progress of the industry since 1955.

TABLE 151
PRODUCTION OF IRON AND STEEL

(in thousand tonnes)

Year	Pig iron	Finished steel
1955	17.57	12.60
1956	18.07	13.38
1961	49.80	28.10
1962	57.96	37.08
1963 (provisional)	65.62	42.57

During the Second Plan, the three existing steel plants, Tata, Indian Iron and Mysore Iron, were earmarked for expansion. Tata were to increase their production to 20 lakh tonnes of steel ingots (15 lakh tonnes of finished steel), Indian Iron to 10 lakh tonnes of steel ingots (8 lakh tonnes of finished steel) and Mysore Iron to 1 lakh tonnes of steel ingots (85,000 tonnes of finished steel). The expansion programmes of TISCO and IISCO have been completed. TISCO's production target of 20 lakh tonnes has not been fully achieved; Government have approved the company's proposals for balancing equipment and other facilities to attain the target. During the Fourth Plan TISCO is likely to expand production to 30 lakh tonnes of ingot steel. In 1963, it produced 10.35 lakh tonnes of finished steel. The IISCO scheme of increasing production from 10 lakh to 13 lakh tonnes of ingots has also been approved. In the second phase of expansion, it is likely to increase production further to 20 lakh tonnes in the Fourth Plan. In 1963, IISCO produced about 6.5 lakh tonnes of finished steel. The expansion programme of the Mysore Works was, however, delayed, since, while the work was under way, it was decided to switch over from

mild to alloy and special steel production. Under the scheme which is being implemented, the plant would reach the production of 77,000 tonnes of finished alloy and special steels corresponding to 1.06 lakh tonnes of ingots, during 1966-67. A company called Mysore Iron and Steel Ltd. was registered in June 1961 which took over the management of the Mysore Works from April 1962.

Three integrated iron and steel plants in the public sector with initial capacity of 10 lakh tons each were set up at Rourkela, Bhilai and Durgapur in the Second Plan period. The management of all the three vests in the State-owned Hindustan Steel Ltd. (authorised capital Rs. 600 crores).

At Rourkela, the construction of the million-ton stage is almost complete. All the units except three of the six hot dip tinning pots have been commissioned. Production in 1963 included 8.93 lakh tonnes of pig iron and 8.45 lakh tonnes of steel ingots. (The fertiliser plant put up as an adjunct to the steel plant was also commissioned in November, 1962.) The annual capacity of the Rourkela plant is being expanded to 18 lakh tonnes of ingots which will be rolled into 12 lakh tonnes of finished steel. Orders for the plant and equipment for expansion have been placed; civil engineering and fabrication work is in progress.

Bhilai has already exceeded the rated capacity in the production of pig iron, steel ingots and finished steel. During 1963 the production of pig iron and steel ingots, at 12.6 lakh and 11.2 lakh tonnes, was about 114 and 112.5 per cent, respectively, of the rated capacity. Under a contract signed between the Hindustan Steel Ltd. and Russian Organisation 'Tyazhpromexport' in February 1962, the capacity of the Bhilai plant is being expanded to 25 lakh tonnes of steel ingots per annum which will be rolled into 19 lakh tonnes of finished and semi-finished steel. The expansion work is likely to be completed by the end of 1965.

The Durgapur plant was completed in 1962. All its units including the coal washery have been commissioned. In December 1962, the plant achieved the full rated capacity in the production of pig iron and 92 per cent of the rated capacity in the production of steel ingots. During 1963, the plant produced 9.58 lakh tonnes of pig iron and 7.13 lakh tonnes of ingot steel. In the Third Plan period, the plant is being expanded to 16 lakh ingot tonnes capacity to produce 12 lakh tonnes of saleable finished steel and semis in addition to 3 lakh tonnes of pig iron for sale. The expansion work, already under way, is expected to be completed by 1966.

A steel plant of 15 lakh ingot tonnes initial capacity is proposed to be set up at Bokaro, the capacity being raised to 40 lakh tonnes a year by 1972-73. A project report prepared by an Indian firm is under Government's examination. Construction work is expected to start within a year or so. A new company namely Bokaro Steel Ltd. has been formed with an initial share capital of Rs. 100 crores, to own and operate the project.

Work in regard to the Alloy and Special Steel plant, being set up at Durgapur, with an initial capacity of 1 lakh ingot tonnes capable of being rolled into 60,000 tonnes of finished products is in progress. The plant, which is likely to start partial production by the end of 1964 and full production in 1966, can be expanded in stages to a capacity of 1.20 lakh tonnes of finished products. Government have also licensed or approved production capacity of 4 lakh tonnes of tool, alloy and special steels in the private sector. Present indigenous production is about 29,000 tonnes of spring steels and 24,000 tonnes of electrical steel sheets a year.

For the supply of washed coal to the steel plants in the public sector, Hindustan Steel Ltd. have their own coal washeries at Durgapur, Dugda and Bhojudih. A washery at Patherdih and another at Dugda are also to be completed shortly.

With the Fourth Plan requirements in view, the Government have

approved the setting up of two stainless steel units—one at Madras with an annual capacity of 7,000 tonnes and another at Vatwa in Gujarat with an initial annual capacity of 10,000 tonnes which could subsequently be increased to 20,000 tonnes.

In 1963, Government sanctioned three schemes for setting up pig iron plants with a total capacity of 1.70 lakh tonnes per annum in Punjab, Madras and West Bengal, increasing the total licensed or approved capacity to 5.15 lakh tonnes. Further, Government have decided to sanction pig iron production in the private sector by conventional blast furnace up to a capacity of 3 lakh tonnes per unit. Two such units are being established in Maharashtra (capacity 2 lakh tonnes) and Goa (3 lakh tonnes). Sponge iron production of 1.20 lakh tonnes capacity has also been sanctioned in Madras. Government have also sanctioned or approved new capacity for rerolling and the production of special types of wires, billets, etc.

Engineering

Since 1947 the Government have been trying to foster the growth of the engineering industry, and India has become self-sufficient in a variety of articles. The development of the engineering industry during the First and Second Plan periods has already been outlined in a previous section.

A number of projects designed to build up and fabricate a wide variety of machines and equipment have been taken up in the public sector. The country is currently producing industrial machinery valued at about Rs. 200 crores per year, and large numbers of transport vehicles, diesel engines, electric motors, etc. (see Table 143).

During 1963, almost all branches of industrial machinery, in general, and chemical, pharmaceutical, paper and pulp machinery and conveyors, in particular, recorded increased production as compared to 1962. The value of production of machinery for sugar mills was Rs. 6.5 crores, textile machinery Rs. 18 crores, chemical and pharmaceutical machinery Rs. 5.3 crores, tea processing machinery Rs. 1.7 crores, industrial boilers Rs. 2.8 crores, paper and pulp machinery Rs. 1.2 crores and conveyors Rs. 1.5 crores. Among others which achieved higher production were steel structurals, pipes and tubes, wire ropes, complete machine tools, grinding wheels, trust drills, hacksaw blades, mobile cranes and industrial trucks. Some of the items which were produced for the first time included M.A.N. multi-cylinder diesel engines, variable speed motors, universal motors, welding generators and wire cloth for paper machinery. The value of output of machine building industries and industrial machinery on the whole was larger in 1963 compared to 1962.

Similarly, electrical and light mechanical industries such as electric lamps and motors, radio receivers, air conditioners, domestic refrigerators, house-service meters, ball bearings, typewriters, sewing machines, power-driven pumps, etc., had substantial increases in output. Additions to capacity were made in a number of industries including sewing machines, electric fans, aluminium, power transformers, etc.

With increasing supplies of steel and other basic raw materials, production is gaining momentum. Stress has also been laid on establishing such industries as make essential raw materials and components needed by various industries.

A Planning Group has been constituted to study the various machine building industries and recommend targets of production for the Fourth and Fifth Plans. The Planning Group has set up ten working groups on electric power, transport, steel and metallurgical industries, mining and drilling and fertiliser and chemical equipment, and machine tools, industrial machinery, textile machinery, structurals and engineering industries. The recommendations of the working groups are under examination.

The Nahan Foundry, Himachal Pradesh, originally established in 1872 as a private organisation, was taken over by the Government of India in 1952 from the erstwhile Sirmur State and formed into a Government company (authorised capital Rs. 1 crore). The foundry manufactures mainly agricultural implements such as cane-crushers. It also produces sleepers for the Railways and cast iron saddles, anchors, etc., for the Posts and Telegraphs Department. Production during 1961-62 amounted to 2,932 tons. Production for the first nine months of 1963 amounted to 2,149 tonnes. Following modernisation and diversification of production, the Foundry also produced 205 electric motors of different sizes during the nine months.

The first batch of predominantly Indian lathes were produced in May 1956 in the machine tool factory at Jalahalli near Bangalore, now a Government of India undertaking, the Hindustan Machine Tools Limited. The Second Plan target for 1960-61 (400 machines) was exceeded in 1957-58. In collaboration with European machine tool manufacturers, diversification of production has been effected and a project for the construction of a second machine tool production unit at Bangalore, so as to raise production capacity to 2,000 machines per annum, was completed in May 1961. During April—December 1963, the two units produced 1,486 machines (value over Rs. 6 crores) compared to 1,120 machines in April—December 1962 (value Rs. 4 crores). It is proposed further to diversify, with foreign collaboration, the company's already wide range of machine tool production. The company's second factory, set up at Pinjore in Punjab, without any foreign assistance, was commissioned in October 1963. Designed to produce all types of milling and gear cutting machines, its target is 1,000 machines of the value of Rs. 5 crores per year by 1966-67. The factory is capable of expansion to a production of 2,000 machines a year. Two more factories are being set up in Kalamassery (Kerala) and Hyderabad. The Kalamassery factory, estimated to cost Rs. 7.50 crores, is expected to go in production by the end of 1964 and the Hyderabad factory, estimated to cost Rs. 7.75 crores, a year later. The HMT watch factory completed in November 1962 (capital cost Rs. 2.5 crores, capacity 2.4 lakh watches a year), produced 80,000 watches during April—December, 1963. To encourage small-scale entrepreneurs and enable the HMT to farm out manufacture of simpler components, an industrial estate has been established at Jalahalli; 30 units of the estate have been completed and 20 more are under construction.

An important development is the setting up of the Central Machine Tool Institute at Bangalore at an estimated cost of Rs. 1.19 crores, of which Rs. 60 lakhs will be a gift from the Czech Government. Its main activities will be development of designing, training, standardisation, prototype manufacture, research, documentation, etc.

The Praga Tools Ltd., Secunderabad, of which majority shares are held by the Union and Andhra Pradesh Governments, also produced, on a monthly average during April to December 1963, Rs. 7.75 lakhs worth of tools. From December 1963, the company has been put under the administrative control of the Department of Defence Production to facilitate production of defence equipment and stores.

To meet the requirements of the Posts and Telegraphs Department of telephone cables, the Hindustan Cables Factory, established at Rupnarainpur, West Bengal, began production in 1954. It exceeded its planned annual capacity of 470 miles of cables in 1956-57. In January—September 1963, the factory produced 3,161 km of cables (value Rs. 2.7 crores) and commenced production of a few varieties of plastic insulated cables and wires. The factory has a programme of further expansion.

The history of the National Instruments Factory, Calcutta, dates from 1830. During World War II, it was converted into a full-fledged instruments factory. In June 1957, it was converted into a Government company called the National Instruments Ltd. It produces various kinds of scientific and precision instruments, including hydrometers, measuring cylinders, barometers and monometers and undertakes repair of aircraft and electrical instruments. The factory is now concentrating on the production of the more important instruments requiring specialised skill and their production has been progressively increasing. During January—October 1963, the factory produced Rs. 65.81 lakhs worth of instruments compared to Rs. 63.53 lakhs in 1962.

The ophthalmic glass project, to be set up at Durgapur (estimated cost Rs. 4 crores), with technical collaboration from USSR, has been transferred from the Heavy Engineering Corporation to the National Instruments Ltd. Construction work for the project has started.

The development programme of the Chittaranjan Locomotive Works included the establishment of a heavy steel foundry, so that the requirements of heavy castings for the railways might be secured entirely from within the country. Accordingly, a 10,000-ton capacity foundry is being set up, which has commenced production. Similarly, the programme of the NIDC included provision of Rs. 15 crores for heavy foundries and forgeshops and for heavy structural shops.

For the manufacture of heavy electrical equipment, a wholly Government company, the Heavy Electricals (India) Ltd. (authorised capital Rs. 30 crores), was formed in August 1956. The plant is being erected at Bhopal with technical collaboration of a British firm. The present sanctioned capital outlay is Rs. 52 crores. Certain sections of the plant such as transformers, switchgears, thermal welders, etc., started production from July 1960. Output during 1962-63 was worth Rs. 3.1 crores which is expected to go up to Rs. 7 crores in 1963-64 and Rs. 10.15 crores in 1964-65. Steam turbine manufacture has been taken up as part of the factory's expansion programme. With this, the total output by the end of the Fourth Plan is estimated to reach Rs. 38 crores a year. A training school for apprentices has been set up, which will also impart training to some personnel for the Heavy Engineering Corporation, Ranchi. Graduate engineer trainees are being sent for training in UK. Another heavy electrical equipment project is being set up with Soviet assistance, at Ranipur, Hardwar. The detailed project report was accepted in October, 1963. Project reports in respect of (i) heavy power equipment project, Ramachandrapuram (near Hyderabad), (capital cost Rs. 33 crores, annual output Rs. 20 crores), and (ii) high pressure boiler project, Tiruchirappalli, (cost Rs. 23 crores, annual output Rs. 18 crores), both being set up with Czech assistance and collaboration, have also been accepted. Both are expected to commence production in 1965.

The production of heavy industrial machinery is being specially fostered by the National Industrial Development Corporation (set up in October 1954 as a Government-owned company). The Corporation has completed examination of a number of projects. It has been entrusted with the initial processing of two projects for precision instruments, to be set up with Soviet assistance, one at Kotah and the other at Palghat. Among other proposals under its consideration are the manufacture of alumina/aluminium with Hungarian assistance and compressors and pumps (Soviet collaboration). An agreement was reached in 1957 with the Government of the USSR for assistance in establishing a heavy machine-building plant at Hatia near Ranchi in Bihar (capacity 80,000 tonnes per annum), a coal mining machinery plant (capacity 45,000 tonnes) and an optical glass factory (both to be located at Durgapur in West Bengal). Adjacent to the heavy machine-building plant is being set up, with Czech assistance, a foundry forge plant,

to serve as its metallurgical base. A body called the Heavy Engineering Corporation (authorised capital Rs. 50 crores) was formed in December 1958 to administer these projects as also the heavy machine tools project (capacity 10,000 tons) to be set up with credit and technical co-operation from the Government of Czechoslovakia. Preparatory work in respect of these projects is in progress.

Locomotives and Coaches

As part of a plan to achieve self-sufficiency in locomotives, the Government in the Ministry of Railways have established a locomotive factory at Chittaranjan in West Bengal. Originally designed to produce 120 locomotives and 50 spare boilers a year, the Chittaranjan Locomotive Works have been expanded and now produce WG type locomotives equivalent of over 200 standard-type locomotives. In 1962-63 the factory turned out 169 broad gauge steam locomotives including 163 WG class, and 14 DC broad gauge electric locomotives bringing the total production, since the factory's inception, to 1,519 steam and 19 electric locomotives. Eventually, the aim is to manufacture 300 standard-size locomotives a year. Capacity is also being developed for producing 72 electric locomotives a year. Besides, the Government-assisted Tata Engineering and Locomotive Works manufactures metre gauge locomotives and is scheduled to satisfy all the requirements of this class of locomotives during the Third Plan. In 1962-63, TELCO produced 63 steam locomotives against 72 in 1961-62. India has become self-sufficient in respect of steam locomotives and may even export them. The same is true of wagons and coaches.

The Diesel Locomotive Works, being set up at Varanasi, has already started assembling locomotives from imported components, and expects to turn out 25 locomotives and a few diesel shunters in 1964-65.

The State-owned Integral Coach Factory at Perambur went into production in October 1955. In 1961-62, 598 coaches were produced and 502 placed on the line. Second shift working in the factory was started in April 1959. The intensification of the second shift working and introduction of the incentive scheme of payment by results have stepped up the factory's outturn of coach shells to 600 broad gauge shells a year, equivalent to 650 standard broad gauge third class. The target of 700 shells per annum is expected to be reached in 1964-65, from which year the furnishing of all the units will also be done in the factory. Production is being diversified to include electric multiple unit coaches and metre gauge coaches. Besides, the Hindustan Aircraft Ltd. is producing 230-240 broad gauge and a private sector company, Jessops, about 220 metre gauge passenger coaches, annually.

Shipbuilding

The Visakhapatnam Shipyard was acquired by the Government from the Scindia Steamship Navigation Company in March 1952. The management was entrusted to the Hindustan Shipyard Ltd., now wholly owned by the Government. The shipyard can build four modern diesel-propelled ships a year. The first ship built in the yard was launched in March 1948. The shipyard is now manned entirely by Indian personnel.

The first and second phases of a Rs. 2.60-crore development programme of the shipyard have been completed. The general performance of the yard has distinctly improved. Procurement of indigenous materials for ship construction has also improved. In the Second Plan, it was proposed to produce 75,000 to 90,000 GRT. A tentative programme for development during the Third Plan has been drawn up at an estimated cost of Rs. 2.44 crores, a part of which costing Rs. 96.08 lakhs has been approved by Government. A second shipyard is proposed to be built at Cochin with

initial shipbuilding capacity of 60,000 GRT per year, to be later raised to 80,000 GRT per year. Land has been acquired for the purpose; a sum of Rs. 20 crores has been provided in the Third Plan for the project. A technical team from Japan visited India in this connection in 1962 and 1963. Their report and proposals are under examination by the Government.

Aircraft

The Hindustan Aircraft Limited has been dealt with in the chapter on 'Defence'.

Chemicals and Drugs

World War I gave a considerable stimulus to the chemical industry in India. Yet India was largely dependent on imports of chemicals on the eve of World War II which gave the industry further impetus. Since Independence, steady progress has been made in the development of the chemical industry. The establishment of the Sindri factory in the public sector was a significant development in this direction. In the private sector, 60 companies dealing with chemical industries came into existence during 1946—50. The development of the chemicals and drugs industry during the First and Second Plan periods has already been outlined in an earlier section. During 1962 production went up in the case of sulphuric acid, caustic soda, soda ash and calcium carbide but declined in the case of bleaching powder, sodium sulphite and sodium thiosulphite. Formaldehyde production was established for the first time in 1962. A rising trend was noticed in the output of plastic raw materials, and polyester production was commenced on commercial scale. Some of the plastic processed items also achieved higher production. A major bottleneck, the dependence on imported intermediates, would be largely overcome with the completion of the projects of the Indian Drugs and Pharmaceuticals Ltd. and the Hindustan Organic Chemicals Ltd. Considerable increase was recorded in the production of penicillin, tetracyclines and chloramphenicol, while production of aspirin and vitamin B₁₂ nearly doubled. Production of zero dyes, organic pigments and sulphur black increased but of other types like naphthols slightly declined. A sulphuric acid plant based on pyrites has been decided to be set up at Sindri, with a capacity of 400 tons a day, under the Pyrites and Chemicals Development Co., which has now been made independent of the NIDC. The plant is estimated to cost Rs. 2.5 crores.

The Government of India have set up a DDT factory in Delhi with the assistance of UNICEF and WHO. The factory, which is managed by the Hindustan Insecticides Ltd. (authorised capital Rs. 1 crore), commenced production in April 1955. Its capacity was doubled to 1,400 tons per annum in 1958. In 1960-61, it exceeded the capacity by 50 tons and reached the production of 1,503 tons in 1961-62. The 1962-63 production was, however, lower at 1,395 tons. A second factory (capital cost Rs. 97 lakhs) set up at Alwaye, Kerala (capacity 1,400 tons of technical DDT) commenced regular production in July 1958 and produced 1,219 tons in 1962-63. Expansion programmes for both factories, involving a cost of Rs. 1.8 crores, are under consideration.

The Government have set up a penicillin factory at Pimpri near Poona with the help of UNICEF and UNTAA. Production began in August 1955. The management of the factory vests in the Hindustan Antibiotics Ltd., a Government undertaking with an authorised capital of Rs. 4 crores. Production at the factory has been steadily increasing; during 1962-63, it amounted to 526.1 lakh mega units of penicillin (in finished form for clinical use) including 24.4 lakh mega units processed from imported first crystals. The 1963-64 output is expected to reach 600 lakh mega units. The factory's annual capacity is being increased to 800 lakh mega units at a cost of Rs. 25 lakhs.

A streptomycin plant with a capacity of 40-45 tonnes per year set up at Pimpri (cost Rs. 2.1 crores) went into regular production in February, 1963. A scheme for doubling the capacity of the plant to 80-90 tonnes per annum at a cost of Rs. 60 lakhs is expected to be completed by early 1964.

A pilot plant for the manufacture of 1.5 tonnes of tetracycline per annum has been established and trial production of oxy-tetracycline commenced in August 1961. Production of chlor-tetracycline hydrochloride has also commenced. Government have approved a scheme for the manufacture of 50 tonnes per annum of Vitamin 'C'; work is in progress for establishing a pilot plant at Pimpri before the project is set up. Production of hamycin, a new antifungal antibiotic, is also being undertaken at a rate of 50 kg. per year. A pilot plant for research and developmental purposes is being established at Pimpri. A number of ancillary industries are developing in the Pimpri Industrial Estate.

Fertilisers

The Sindri fertiliser factory, built by the State at a cost of about Rs. 28 crores, is under the management of the Fertiliser Corporation of India Ltd. formed in January 1961 (authorised capital Rs. 75 crores), to administer the public sector fertiliser companies. The Sindri factory went into production in October 1951. In April—December, 1963, it produced 2,30,597 tonnes of ammonium sulphate compared to 2,38,498 tonnes during the corresponding period in the preceding year. The scheme to raise the output by about 60 per cent by utilising the entire quantity of 100 lakh cubic feet of gas from the coke oven plant has been completed at a cost of about Rs. 15 crores. The expansion plants now running at maximum possible capacity envisage the production of 70 tons of urea and 400 tons of ammonium sulphate nitrate (double salt) per day. In April—December, 1963, the factory produced 13,368 tonnes of urea and 34,177 tonnes of double salt, compared to 13,390 and 46,484 tonnes, respectively, in the corresponding period in the preceding year.

A factory has been set up at Nangal (cost about Rs. 30 crores) which also is under the management of the Fertiliser Corporation of India, for production of 3,88,000 tonnes of nitro-limestone (equivalent to 80,000 tonnes of nitrogen) and 14 to 15 tons of heavy water per annum. The fertiliser part of the factory was commissioned in February 1961 and produced 2,57,666 tonnes of calcium ammonium nitrate during April to December 1963 as against 1,99,127 tonnes during the same period of 1962. The heavy water plant produced its first quantum in August, 1962. During April—December 1963, it produced 8,739.5 kg of heavy water, for supply to the Atomic Energy Commission. The Rourkela fertiliser factory, an adjunct of the Rourkela Steel Plant, with a rated annual capacity of 5.8 lakh tonnes of calcium ammonium nitrate, was commissioned on trial basis on December 1, 1962, and produced 1,06,264 tonnes during 1963. Additional units are being set up in the public sector at Trombay, Namrup, Gorakhpur and Korba, with capacities of 90,000, 45,000, 80,000 and 1 lakh tons of nitrogen, respectively. Another unit is being set up at Neyveli with a capacity of 70,000 tons of nitrogen; the factory is integrated with the Neyveli Lignite Corporation.

Licences have also been granted for the setting up of fertiliser plants of different capacities in the private sector at various sites such as Visakhapatnam, Kothagudam (AP), Hanumangarh (Rajasthan), Tuticorin (Madras), Baroda and Mangalore. A private sector factory at Ennore (Madras), with a capacity of 8,250 tons of nitrogen, went into production in January 1963. The third stage of expansion of the FACT now under implementation envisages the production of 70,000 tons of nitrogen and 33,400 tons of P_2O_5 per annum, the end products being ammonium

sulphate, ammonium phosphate, single superphosphate and ammonium chloride. The scheme will cost about Rs. 11.5 crores; the Union Government have provided the bulk of funds required for the expansion scheme, thereby taking majority control in the company.

Oil

At the beginning of the Second Plan, the country's only producing oilfield was in Assam, around Digboi. The Oil and Natural Gas Commission (ONGC) has since been carrying out oil exploration work in a number of areas with assistance from certain countries. On the results of this work, drilling was commenced mainly at Cambay, Ankleshwar, Olpad, Sanand, Kalol and Wavel in Gujarat, Rudrasagar and Sibsagar areas in Assam, Adampur and Janauri areas in Punjab and Ujhani area in U.P. Crude oil has been discovered in commercial quantities in Gujarat; the Commission plans to produce sufficient crude to sustain a 30-lakh ton refinery in the State by the end of the Third Plan. A petro-chemical complex will also be established in Gujarat to produce certain intermediates and derivatives. A similar complex is being set up at Bombay in the private sector.

At the commencement of the First Plan, practically the entire demand of the country for petroleum products was met by imports, the output of the Assam Oil Company's refinery at Digboi having been a little more than 5 per cent of the total requirements. The establishment of three refineries was accepted as part of the First Plan : two were set up at Trombay (near Bombay) by the Standard Vacuum Oil Company (now ESSO) of New York and the Burmah-Shell Group of London, respectively, and the third by the Caltex Company at Visakhapatnam. The annual production capacity of all the refineries at the end of 1957 was about 43 lakh tons in terms of crude processed petroleum. The patterns of production of these refineries was revised in 1958 to increase the output of kerosene and diesel oils to meet the country's urgent requirements. The present throughout of all these refineries amounts to about 78.5 lakh tons a year.

The public sector refinery at Nunmati (near Gauhati), with a refining capacity of 7.5 lakh tonnes, set up by Indian Refineries Ltd. (incorporated in August 1958, authorised capital Rs. 30 crores) with the collaboration of the Rumanian Government, went into operation on January 1, 1962 and is now on full stream. The total cost of the refinery is about Rs. 17.70 crores.

The refinery at Barauni is also being established by Indian Refineries Ltd. in collaboration with the USSR Government, with a refining capacity of 20 lakh tonnes per annum. The cost of technical assistance and equipment to be supplied by USSR will be met out of two credits, of 100 million roubles (about Rs. 11.9 crores) and 50 million roubles (Rs. 5.95 crores). The total cost of the refinery may be of the order of Rs. 41 crores. The refinery is likely to be commissioned in three stages by August 1964, and its expansion to 30 lakh tonnes capacity is expected to be completed by 1966.

Another public sector refinery, with a capacity of 20 lakh tonnes per annum, is being established at Koyali near Baroda, in Gujarat, by ONGC with financial and technical collaboration from the USSR authorities, to process indigenous crude oil discovered in the Gujarat region. The refinery is likely to come into operation in two stages of 10 lakh tonnes each—the first by the end of 1964 and the second by May/June 1965. It is also being expanded to 30 lakh tonnes capacity by 1966.

An agreement was signed in April 1963 between the Government of India, an Indian firm and Phillips Petroleum Co. of the USA for setting up another oil refinery, with a capacity of about 25 lakh tonnes per annum, at a suitable location in Cochin area. The refinery designed to process imported crude may be completed by the end of 1965.

The Indian Oil Company Ltd., a wholly Government-owned company, was incorporated in June 1959 (authorised capital Rs. 12 crores) for the

marketing and distribution of petroleum products in the country. It also handles deficit petroleum products, such as kerosene, HSD oil, aviation turbine fuel, etc., being imported from USSR and Rumania against rupee payments. The company has also made arrangements for import of transformer oil and lubricants from the USA and UK.

To handle the output of public sector refineries as well as imports, it has started large-scale construction of bulk storage facilities at main ports and important inland points and developed a network of storage depots, etc., all over the country.

The Oil India Ltd., (OIL) in which the Government of India and Burmah Oil Company have equal shares, was incorporated in Assam in February 1959, for exploration and production of petroleum and crude oil (including natural gas) and for the construction of pipelines for transport of crude produced in its oilfields to the refineries; the first stage of the 720-mile long pipeline from Naharkatiya to Nunmati was commissioned in March 1962. The company's present potential is 30 lakh tonnes per annum.

A number of pipelines are also proposed to be laid to connect Gauhati and Siliguri, Calcutta/Haldia and Barauni, Kanpur and Barauni and Gujarat oilfields with power stations and other consuming centres. The Petroleum Pipelines Act, 1962 was promulgated to provide for the acquisition of right of user in land for laying petroleum pipelines.

India imports crude oil for being processed in the refineries at Bombay and Visakhapatnam, and refined petroleum products to meet the increasing demand in the country. Imports, during 1962, of crude and refined products amounted to 90 lakh tonnes. India also exports certain petroleum products such as light distillates and paraffin wax; export earnings during 1963 totalled Rs. 5.5 crores.

Coal and Lignite

Coal mining was first started at Raniganj, Bengal, in 1814. The construction of railways gave the industry a great impetus and a number of joint-stock companies, mostly European owned and managed, came into the field.

In 1868, coal production amounted to 5 lakh tons and showed rapid increases thereafter. In 1880 it was 10 lakh tons, in 1890 about 22 lakh tons and in 1900 about 61 lakh tons. For the next three decades it increased steadily at an average rate of about 6 lakh tons a year to reach 2,38 lakh tons in 1930. In 1940 and 1950, the production was 2,51 lakh tons and 3,20 lakh tons respectively, and in 1955 it had reached 3,82 lakh tons. The target for the end of the Second Plan was 6,00 lakh tons; of the additional 2,20 lakh tons, 1,00 lakh tons was allotted to the private sector and 1,20 lakh tons to the public sector (1,05 lakh tons to the National Coal Development Corporation, a Central Government company set up in October 1958, and 15 lakh tons to the Singareni Collieries Co. Ltd., in which the Central and Andhra Pradesh Governments are collaborating).

Production during 1963-64 (up to December 1963) was 4,93 lakh tonnes (against a target of 6,90 lakh tonnes), of which 3,90 lakh tonnes was produced in the private sector. Production in the calendar year 1963 amounted to 6,66 lakh tonnes, compared to 6,15 lakh tonnes in 1962.

The Third Plan target of coal raising was fixed at 9,70 lakh tons (9,85 lakh tonnes) per annum by 1965-66—an additional output of 3,70 lakh tons. Of this, the private sector was allotted 1,70 lakh tons and the public sector 2 lakh tons.

For the supply of coking coal to the Bhilai and Rourkela steel plants, a coal washing plant, costing about Rs. 2.46 crores and with an annual capacity of 16 lakh tons of washed coal, was set up at Kargali, District Hazaribagh (Bihar) in November 1958, which functions under the National Coal Development Corporation. Its production of washed coal in 1963 was 12.7 lakh tonnes compared to 10.6 lakh tonnes in 1962.

The Integrated Neyveli Lignite Project envisaged the mining of 35.6 lakh tonnes of lignite per annum to be utilised as follows :

- (i) 15.2 lakh tonnes for the production of 2,50,000 kw of thermal power (in five units of 50,000 kw each),
- (ii) 5.2 lakh tonnes for the production of 1,54,000 tonnes of urea to be utilised as chemical fertiliser, and
- (iii) 15.2 lakh tonnes for the production of 3,86,000 tonnes of carbonised briquettes for use as domestic and industrial fuel.

Preliminary work has since been started to expand the project. Lignite production is proposed to be raised to 60 lakh tonnes in the Third Plan and thermal power to 4 lakh kw and later to 6 lakh kw.

The lignite bed was exposed, after removing 180 feet of overburden, in August 1961. Up to the end of November, 1963, 10 lakh tonnes of lignite had been mined. The full production of 35.6 lakh tonnes is expected to be achieved in early 1966, when the consuming units would be in operation.

The Neyveli thermal power station is one of the industrial enterprises being set up under the Indo-Soviet 500-million rouble credit agreement of November 1957. The first unit of the power station was commissioned in June, 1962 and the second, third and fourth in January, July and October, 1963, respectively. The fifth unit is likely to be commissioned in March, 1964. The fertiliser plant is expected to commence production in 1966 and the briquetting and carbonisation plant by the end of 1965. A clay washing plant at Neyveli was commissioned in December 1961. With an annual capacity of 6,000 tonnes, the plant had produced about 4,509 tonnes of washed clay up to the end of November 1963.

Other Minerals

In 1962, on daily average, 6,84,000 persons were engaged in mining (including coal mining) and there were 3,200 working mines excluding minor minerals and minerals prescribed under the Atomic Energy Act, 1948. In India concessions for all minerals, except petroleum and natural gas, are granted in accordance with the provisions of the Mines and Minerals (Regulation and Development) Act, 1957. The more important mining centres are in Bihar, Orissa, West Bengal, Madhya Pradesh, Rajasthan, Mysore and Andhra Pradesh and the more extensively worked minerals are coal (850 collieries), mica (714 mines), manganese ore (475 mines), iron ore (269 mines), gypsum (46 mines), limestone (155 mines), and bauxite (47 mines).

The value of mineral production in India during 1963 was about Rs. 212 crores as against Rs. 205.3 crores in 1962. The total value of mineral production (including coal) in India since 1911 is given in the following table.

TABLE 152
VALUE OF MINERAL PRODUCTION IN INDIA (1911-1963)

(value in lakhs of rupees)

Year	1911	1921	1931	1939	1948*	1955	1961	1962	1963
Value	11,40	32,90	23,90	20,20	64,00	94,40	179,50	205,30	211,90**

The quantity index of mineral production in 1962 stood at 115.4 (base 1960=100) compared to 105.7 in 1961. Table 153 shows the output and value of the principal minerals in 1962 and 1963.

*From 1948 onwards, mineral production is calculated on the pits mouth value basis.

**Excluding the value of minor minerals for which data are not available.

pletely abolished to make Indian tea competitive in foreign markets. The refund of excise duty, introduced in 1962, has been withdrawn, and a surcharge of 20 per cent on the existing duties in each zone has been imposed. Central excise on green tea produced in different areas was, however, reduced by 5 P. to 10 P. from mid-November 1963. Among the several schemes for development and encouragement of the tea industry are the promotional activities in India and abroad of the Tea Board, loans granted to weaker gardens for repair and renovation of plant and machinery, supply of machinery on hire-purchase basis, grant of transport subsidy in certain cases, supply of fertiliser to the gardens, and research in and surveys of the tea industry. Under the Coffee Development Plan, originally for five years ending September 1962 and now extended for another five years, loans are sanctioned to planters; the total area brought under the Development Plan by the end of October 1963 was about 5,700 acres, with a total loan of Rs. 41.81 lakhs sanctioned to 605 applicants. Studies on fundamental and applied aspects of coffee culture and field experiments on cultural, manurial, plant protection problems and breeding aspects have also been conducted. The Rubber Board introduced a replanting subsidy scheme in 1957; till the end of 1963, Rs. 1.2 crores had been disbursed for replanting 24,689 acres. Consumption of rubber has been increasing and may rise to 1 lakh tons by the end of the Third Plan. Besides increasing the production of natural rubber, it is proposed to produce 15,000 tons of reclaimed rubber and 50,000 tons of synthetic rubber. A factory has been set up at Bareilly for producing synthetic rubber.

SMALL-SCALE AND COTTAGE INDUSTRIES

Although there has been considerable development of large-scale industries, India remains mainly a country of small-scale production. It is estimated that about 2 crore persons are engaged in cottage industries. The handloom industry alone employs 50 lakh people or nearly as many as are employed in all other organised industries, including large-scale industries, mines and plantations.

The work of organising these small industries is primarily the responsibility of the State Governments. To supplement their effort, the Central Government have set up the All-India Khadi and Village Industries Commission, the All-India Handicrafts Board, the All-India Handloom Board, the Small-scale Industries Board, the Coir Board, and the Central Silk Board.

Financial assistance to small industries* is given by the Government, State Financial Corporations and banking institutions including the State Bank of India. The Credit Guarantee Scheme, formulated in July 1960 for encouraging the lending institutions to finance small industry units, was extended to the whole country from January 1963. Up to the end of 1963, the Reserve Bank of India, the Guarantee Organisation, had issued guarantees for Rs. 27.26 crores**. Central loans are also given to State Governments for establishing industrial estates, which seek to remove small industrial units from urban areas and provide them new sites with factory space and common facilities for efficient working. By the end of June 1963, of the 115 industrial estates completed, 84 were functioning. Credit facilities are also made available for establishment of the estates by co-operative societies and joint stock companies. Apart from this, a number of projects for intensive development of small industries in selected rural areas have been approved. Funds for the projects will be provided by State Governments, all-India Boards and from loans and credits from financial and

*The definition of 'small-scale' industries has been revised so as to include all industrial units with a capital of not more than Rs. 5 lakhs, irrespective of the number of persons employed.

**Fuller details are given in Chapter XV, 'Finance'.

co-operative institutions. The Government are also making special efforts to encourage industrial co-operatives, which now form over 10 per cent of the total number of co-operative societies.

A programme of technical assistance to small industries, known as the Industrial Extension Service, has been undertaken directly by the Central Government. Sixteen small industries service institutes (one for each State except Gujarat where there is a branch institute and one in the Union Territory of Delhi), five branch institutes and 64 extension/production centres have been set up. These offer technical and training facilities to small units. Experts are also brought in from abroad to help these industries in technical matters and Indian technicians are sent for training abroad.

Another significant development was the establishment of the National Small Industries Corporation in February 1955. Its Contract Division has established liaison with Government purchase departments and has evolved a workable arrangement for giving contracts to small units. During January—November 1963 contracts received by small-scale industries under this scheme from the Directorate General of Supplies and Disposals and railways totalled Rs. 30.35 crores. The Corporation has also been guaranteeing since January 1959 credits to these small units offered by the State Bank of India for execution of the orders. The Corporation has introduced a scheme for hire-purchase of machinery and equipment needed by small units; machines worth Rs. 47.5 crores were delivered to small units. The terms and conditions have been liberalised but from August 1960 a service charge of 5% of the value of the machines was introduced. Decentralisation was achieved through four subsidiary corporations set up in 1957 at Bombay, Calcutta, Madras and Delhi. The activities of the Corporation, which also helps in the setting up of small industrial units as ancillary to large ones, are financed by loans and grants by the Central Government.

The All-India Handicrafts Board was set up in 1952 to improve production and marketing of handicrafts in India. The Board is running 15 pilot centres—four each for training and research, two each for revival for crafts-cum-production and production and one centre each for training-cum-production, development-cum-production and design development-cum-production. There are also four design centres and four regional offices to provide assistance in designing and other activities. About 150 emporia have been set up all over India for effective marketing of handicrafts. The Third Plan has provided Rs. 5 lakhs to finance artisans and their co-operatives through the emporia. A technical committee has been set up for formulating specifications and schemes on quality control from raw material stage to final acceptance of the goods by the consumer.

Publicity abroad through exhibitions and other media is being conducted by the Handicrafts and Handloom Export Corporation (created with the merger of the Indian Handicrafts Development Corporation and the Handloom Exports Organisation). Exports have been rising in recent years.

The coir industry is mainly carried on on a cottage basis, though some factories employ wooden looms worked by manual labour. Of an estimated annual production of 1.42 lakh tonnes of coir yarn, more than 90 per cent is produced in Kerala. Almost the entire production of about 21,000 tonnes of manufactured articles comes from that State.

The Coir Board is engaged in popularising and promoting coir products in India and abroad. The Third Plan provides Rs. 3.13 crores (Rs. 75 lakhs for Central and Rs. 2.38 crores for State and Union Territories schemes). Emphasis in the Plan has been laid on improving the quality of production, developing new lines of production and on stepping up exports. A research institute at Kalavoor, near Alleppey (Kerala), and a regional research station at Uluberia in Howrah district (W. Bengal) have been set up. The institute at Kalavoor started functioning in April 1959.

Exports during 1962 amounted to about 7.79 crore kg. valued at Rs. 12.13 crores. In 1963, the corresponding figures were 7.73 crore kg. and Rs. 11.91 crores respectively. The revised export promotion scheme of October 1962 ensures easy availability of raw materials and machinery for actual use of exporters. To liberalise exports, licensing of export of coir goods was abolished in July 1963 for registered exporters. The rate of incentive was enhanced from 1½ to 2 per cent on export of coir yarn and from 5 to 10 per cent for coir products from July 1963. Steps are being taken to mechanise production.

In 1962 the production of all types of silk in India amounted to 17.8 lakh kg. Nearly half the quantity is produced in Mysore State followed (in order of importance) by the States of West Bengal, Assam, Jammu and Kashmir, Madhya Pradesh and Bihar.

The Central Silk Board, established in 1949, looks after the development of silk and sericultural industry and co-ordinates research. The research institutes located at Berhampore (West Bengal), Channapatna (Mysore), Titabar (Assam) and Chaibasa (Bihar), which undertake experimental work, have now been reorganised on the lines recommended by the Central Research Co-ordination Committee, and a Central Tasar Research Station at Ranchi and a Central Tasar Silk-worm Seed Station at Lakha (M.P.) are being established. The research institute at Mysore and the Hill Rearing Station at Coonoor (Madras) bring about improvements in various branches of the industry. The Central Silk-worm Seed Station, Srinagar, evolves new strains of silk-worms. The Berhampore research station with its sub-station at Kalimpong conducts experiments and research to bring about improvement and economy in different stages of production. The All-India Sericultural Training Institute at Mysore and four regional training institutes in Assam, Bihar, Mysore and West Bengal provide practical and theoretical training to personnel for the industry. The Board also sponsors visits of foreign experts and deputation of Indians abroad. The Government Spun-silk Mills in Mysore and Assam are working to full capacity on single shift basis from March 1962.

During the First and Second Plan periods, Rs. 218 crores (Rs. 175 crores during Second Plan) were spent by the Government for the development of the village and small industries. Rs. 264 crores have been provided in the Third Plan for the purpose (about Rs. 141 crores for the schemes of the States and Union Territories and the rest for Central Government schemes and programmes). The industry-wise allocation is as follows.

TABLE 155
OUTLAY ON VILLAGE AND SMALL INDUSTRIES (THIRD PLAN)
(in crores of rupees)

Industry	Second Plan (estimated expenditure)	Third Plan		
		States and Union Territories	Centre	Total outlay
Handloom	29.7	31.0	3.0	34.0
Powerlooms in the handloom sector	2.0	—	4.0	4.0
Khadi—traditional	82.4	3.4	37.0	92.4
—ambar			32.0	
Village industries			20.0	
Sericulture	3.1	5.5	1.5	7.0
Coir spinning and weaving	2.0	2.4	0.8	3.2
Handicrafts	4.8	6.1	2.5	8.6
Small-scale industries	44.4	62.6	22.0	84.6
Industrial estates	11.6	30.2	—	30.2
TOTAL	180.0*	141.2	122.8	264.0

*Actual outlay anticipated to be of the order of Rs. 175 crores.

Khadi Industry

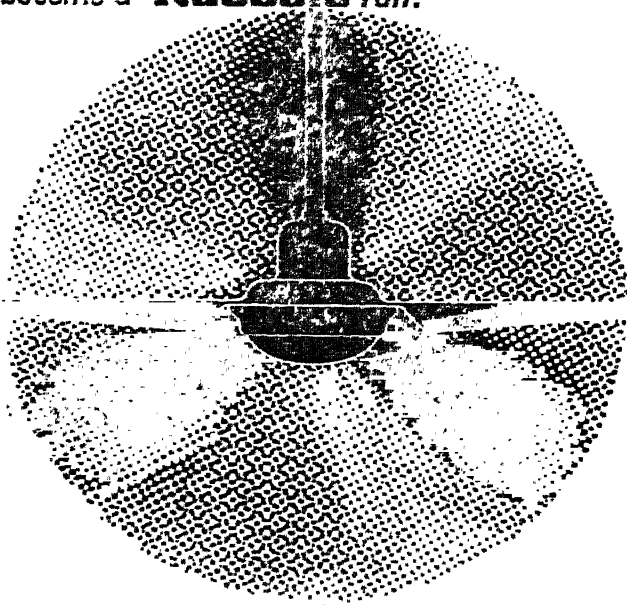
Financial assistance to the khadi industry is given by the All-India Khadi and Village Industries Commission through co-operative societies, registered institutions, State Governments and the statutory boards set up by the State Governments. To encourage the production of khadi different rates of rebate were allowed to the consumer. From April 6, 1964, the sales rebate was withdrawn and a new scheme introduced to provide facilities for free weaving of handspun yarn. The new scheme ensures supply of cloth to spinners in the villages who also grow cotton practically without any charge. Non-grower spinners also would benefit inasmuch as they would get cloth at the nominal rate of 37 P. per square yard. Even non-spinners would be able to purchase the cloth at a much lower rate than mill cloth. In urban areas, too, consumers would have to pay about the same price as hitherto. The scheme is expected to attract more and more people to spinning as well as expand the market for khadi. Several corrective measures were also introduced in recent years to remove organisational and operational problems, such as activation of idle *ambar charkhas* and disposal of accumulated and unsold stocks of khadi. The measures have led to a significant improvement; for example the value of production of khadi in 1952-53 was Rs. 1.94 crores and of sale Rs. 1.95 crores. In 1959-60, the corresponding figures were Rs. 14.14 crores and Rs. 10.60 crores. For the first nine months of 1962, production of khadi of all varieties amounted to 386.19 lakh sq. yards and sales to Rs. 7.68 crores. For the same period of 1963, the figures were 419.11 lakh sq. metres and Rs. 10.41 crores respectively. This provided employment to about 17.18 lakh persons.

The Third Plan laid down that further development of khadi would be mainly along the lines of the reoriented programme drawn up by the Khadi and Village Industries Commission in which the emphasis would primarily be on intensive efforts to secure integrated rural development of selected compact areas or *gram ekais*. It proposed to organise 3,000 *gram ekais*, each covering a selected village or group of villages having a population of 5,000 each. Local plans for the maximum exploitation of available resources for local use would be prepared with a view to achieving local self-sufficiency to the extent possible. These plans would be executed by registered institutions as well as service co-operatives and gram panchayats. The responsibility of the Commission would be largely limited to provision of financial and technical assistance and training facilities and the preparation and execution of the programmes would be left to the State boards, the institutions and the local agencies at the village level. Gradual reduction of dependence on urban markets and correspondingly greater production for local use and improving the techniques of spinning and weaving, so as to raise the output and earnings, would be an aim. By the end of the Third Plan period, about 40-50 per cent of khadi production is expected to be marketed locally and the prices are to be reduced by 15-20 per cent.

Ambar Charkha

A four-spindle manually operated charkha, known as *ambar charkha*, was evolved in 1956 and a programme for the manufacture and distribution of these *ambar charkhas*, and for the training of instructors, carpenters, spinners and others was introduced in 1956-57. Certain improvements have been introduced in the *ambar charkha* which would raise the productivity from 1 hank to 1.5 hanks per hour.

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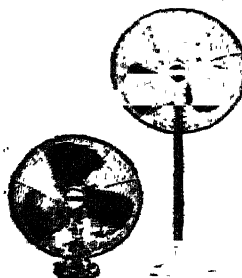
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CHAPTER XXI

TRADE

EXTERNAL TRADE

The total value of India's foreign trade (imports and exports including re-exports) in merchandise and treasure-gold during 1962-63 amounted to Rs. 1,772.45 crores—imports Rs. 1,078.76 crores and exports Rs. 693.69 crores. The value of India's imports and exports, the total value of her foreign trade and the balance of merchandise trade since 1950-51 are given below :

TABLE 156
FOREIGN TRADE OF INDIA*

in crores of rupees

Year	Imports	Exports (including re-exports)	Total value of foreign trade	Balance of trade
1950-51	650.45	600.68	1,251.14	— 49.73
1955-56	774.36	608.13	1,383.19	—165.52
1960-61	1,122.48	642.32	1,764.80	—480.16
1961-62	1,091.51	660.55	1,752.06	—430.96
1962-63	1,078.76	693.69	1,772.45	—385.07
1963-64 (April to October) ..	635.27	436.55	1,071.82	—198.72

The above figures show that India has been witnessing an adverse balance of merchandise trade (including gold) all these years. Because of heavy imports, the adverse balance kept on rising, particularly during the Second Plan period; in 1961-62, the upward trend was arrested. Exports have also been increasing.

Balance of Payments

The following table shows the balance of payments position since 1960-61 and the financing of the current balance of payments deficit. Figures for April-September 1962 are given for comparison with the corresponding period of 1963.

*Source : Department of Commercial Intelligence and Statistics.

Notes : (1) The figures cover trade by sea, air and land. (2) India's trade with Nepal (by and), Tibet, Sikkim and Bhutan and the trade arising in the Laccadive, Minicoy and Amindivi Islands is excluded owing to the absence of the necessary customs arrangements. Data relating to Goa, Daman and Diu and Andaman and Nicobar Islands are included from April 1963. (3) Transshipment trade and ships' stores are also excluded. (4) From 1957, direct transit trade (trade of adjacent countries passing in transit through Indian ports on through bills of lading) is excluded, but indirect transit trade (goods previously imported but kept in warehouses and afterwards re-exported) are included first under imports and thereafter under re-exports. (5) Besides merchandise trade, trade in treasure-gold throughout the period under review and silver up to December, 1956 has been included. From 1957 silver is covered under merchandise. (6) The import figures exclude certain consignments of foodgrains and Government stores awaiting adjustments. (7) While exports are valued on f.o.b./f.o.r. basis inclusive of export duty and other charges payable at the time of export, imports are valued on c.i.f. basis and are exclusive of import duty. (8) The above figures differ from those published earlier because of corrections relating to (i) short-shipments and shut-out shipments in the case of exports, and (ii) final adjustments in the transactions of Government imports. (9) The tables relating to India's foreign trade include corrections received up to March 1963.

TABLE 157

INDIA'S OVERALL BALANCE OF PAYMENTS*

(in crores of rupees)

	1960-61	1961-62 (Revised)	1962-63 (Preliminary)	April— Sept. 1962 (Preliminary)	April— Sept. 1963 (Preliminary)
1. Imports—					
(a) Private	1,125.7	1,001.6	1,089.4	536.8	594.8
(b) Government	844.0	638.3	625.9	322.5	310.3
2. Exports—					
(a) Government	461.7	363.3	463.5	214.3	284.5
(b) Private	630.5	667.7	682.2	315.5	370.6
3. Trade balance (2-1) ..	-475.2	-333.9	-407.2	-221.3	-224.2
4. Official donations	45.2**	45.7	77.0	33.6	44.7
5. Other invisibles (net) ..	37.6***	-14.9***	-3.7***	-1.5	11.8
6. Current balance of payments (net) (3+4-5)	-392.4	-303.1	-333.9	-189.2	-167.7
7. Errors and omissions	-6.3	5.3	-13.2	-4.2	-19.8
8. Official loans (gross)	256.6	281.0	383.7	172.3	212.1
9. Other capital transactions (net)	93.6	-47.9	-50.8	-42.4	-40.6
10. Drawings on IMF (net)	-10.7	58.4	11.9	11.9	-11.9
11. Draft on foreign exchange reserves	59.2	6.3	2.3	51.6	27.9
12. Current balance of payments deficit (total of 7 to 11) ..	392.4	303.1	333.9	189.2	167.7

Imports

Imports in April-September 1963, at Rs. 594.8 crores, were larger by Rs. 58 crores compared to the corresponding six months of 1962. Government imports were up by Rs. 70.2 crores. Private imports, on the other hand, declined, in aggregate, by Rs. 12.2 crores. Cotton imports were lower by about Rs. 13 crores; imports of many other items also were lower than in the corresponding period of the preceding year. But imports of electrical goods were up by nearly Rs. 4 crores and of machinery by about Rs. 10 crores. Table 158 gives figures of major private imports since 1960-61.

*The figures of imports and exports in this and the following sections are based on exchange control data and are not comparable with those published by the Directorate General of Commercial Intelligence and Statistics. For an explanation of the difference, see *India's Balance of Payments 1948-49—1955-56* (Reserve Bank of India, Bombay), pp. 7 and 27-28.

**Includes Rs. 8.4 crores earmarked by US authorities to finance exports of goods and services to Nepal under their economic aid programme to that country.

***Includes Rs. 8.3 crores paid to the IBRD under the Indus Water Treaty 1960. NOTE : Item 8 includes receipt of refinancing credits from West Germany and item 9 corresponding amortisation payments.

TABLE 153
MAJOR PRIVATE IMPORTS

(in crores of rupees)

	1960-61	1961-62 (Revised)	1962-63	April-Sept. 1962*	April-Sept. 1963*
Food, drink and tobacco** ..	25.8	21.8	25.6	9.9	9.8
Electoral goods.. ..	17.5	20.3	16.6	6.9	10.8
Mineral oils	77.3	83.0	80.4	44.0	44.7
Cotton, raw and waste ..	78.4	63.0	55.9	37.4	24.5
Chemicals	29.6	33.5	37.3	19.8	16.5
Iron and steel	58.9	61.3	52.6	27.7	25.4
Other metals	35.4	34.4	38.7	19.9	18.5
Textile yarns	15.3	11.7	12.6	6.2	5.1
Machinery	124.6	140.3	138.4	69.7	79.5
Vehicles (incl. locomotives) ..	42.8	39.5	33.6	15.6	14.6
TOTAL (including others) ..	644.0	638.3	625.9	322.5	310.3

Exports

Exports worth Rs. 682.2 crores in 1962-63 were Rs.14.5 crores more than the 1961-62 (revised) figure. In the first half of 1963-64 (April-September 1963), the exports amounted to Rs. 370.6 crores compared to Rs. 315.5 crores in the corresponding period of 1962, showing an encouragingly upward trend.

On the basis of customs returns, which record exports in terms of both value and quantity, exports for the whole year of 1963 totalled Rs. 791 crores showing an increase of Rs. 104 crores or about 15 per cent over the total exports of Rs. 687 crores during 1962, which set up a new record and the highest rate of increase achieved so far. The exports included those from Goa, Daman and Diu for both years. The high level of exports, coupled with a decline of Rs. 34 crores in imports—from Rs. 1,126 crores in 1962 to 1,092 crores in 1963—resulted in a decline of Rs. 138 crores in trade deficit, from Rs. 439 crores in 1962 to Rs. 301 crores in 1963.

The rise in exports was well spread over a number of commodities, notably sugar, vegetable oils, tea, oilcakes, jute manufactures, tobacco, cashew kernels, gums, fruits and vegetables, textiles including handloom textiles, woollen manufactures, handicrafts, carpets, raw cotton, leather and footwear, iron and steel scraps, iron ore, engineering goods, chemicals, plastics, marine products, etc. The bulk of increase in exports was the result of increase in quantity exported in spite of some decline in the unit prices of several commodities. For example, in the case of raw cotton, the unit value went down from Rs. 2,098.25 in 1962 to 2,030.65 in 1963 but the quantity increased from 57,000 to 62,000 tonnes and the earnings from Rs. 11.96 crores to Rs. 12.59 crores. Or again, in the case of manganese ore, while the unit value slumped from Rs. 106.27 to Rs. 88.85, the earnings had only a marginal decline from Rs. 8.48 crores to Rs. 8.21 crores, because the quantity exported increased from 798,000 to 924,000 tonnes.

Among the items which showed a slight fall in earnings were black pepper, essential oils, raw wool and mica. Exports of black pepper declined because of somewhat larger world crop coupled with a fall in price. The decline in the case of lemongrass oil was due to the development of synthetic oil and the increasing competition from cheaper natural lemongrass oil from Guatemala. Raw wool exports declined mainly as a result of the increasing domestic requirements, particularly for defence. In the case of mica, the decline was due to a fall in the price though the quantity of exports was larger than in 1962. In a few selected commodities, however, higher unit prices also contributed to the increased earnings.

*Preliminary.

**Including cashew-nuts.

About 79 per cent of the aggregate exports of Rs.791 crores was achieved without any special assistance; incentives and assistance were considered necessary in the case of the remaining 21 per cent in view of the disabling factors of high costs, scarcity of raw materials and rise in internal demand. Exports covered by special export promotion schemes comprised about Rs. 165 crores and the incentives relating to these exports accounted for about Rs. 35 crores.

TRADE POLICY

The main objectives of the trade policy are to ensure equitable distribution of goods at fair prices in the home market; to bring about a marked increase in exports by creating surpluses in the export sector and by establishing export oriented industries; and to promote substitution of imported goods and raw materials by indigenous production.

Import Policy

In formulating the import policy for April 1963—March 1964, the Government were guided by the prevailing foreign exchange position and the priorities called for by the Emergency, so as to serve the needs of both defence and industrial development. Accordingly, import of a number of low priority items and of items where indigenous production has increased, was reduced. (A committee set up in the Planning Commission on import and export substitution has been assigned the task of keeping a watch on continuous reduction or deletion of imports of the goods which are indigenously produced or which could be substituted by indigenously available materials). Raw materials needed for production of less essential or non-essential items were banned or allowed on a restrictive scale.

Quotas for several items which had been severely slashed during the preceding period on account of the country's sterling balances position were somewhat liberalised. Seventynine more items were made licensable to the Established Importers bringing the total number to 170. The grant of quotas to Established Importers was, however, confined to such items which had either a special importance to the economy or had an export promotion angle. To promote the family planning programme, the quota for rubber contraceptives was liberalised and that for medicinal contraceptives maintained at the preceding year's level. Increased allocation of foreign exchange was also made to small-scale industries to give fillip to this sector of the economy.

As in the preceding year, the import policy was announced for the whole year and all applications for licences were required to be made on an yearly basis except in certain specified cases. Applications for Government licenses continued to be received on half-yearly basis against specific release of foreign exchange.

Licences were issued on annual basis on the condition that 50 per cent of their value could be utilised within the first six months and the remaining would be subject to such cuts as would be decided upon and endorsed on the licence for utilisation in the second half of its validity period.

During the second half, however, no cuts were imposed and endorsement for validation was also dispensed with.

With effect from October 1963, all orders issued by the Government under the Imports and Exports (Control) Act 1947 were extended to the Union Territory of Goa, Daman and Diu.

The import policy for April 1964—March 1965 continues to be restrictive. Changes have, however, been effected, wherever practicable, in the light of suggestions made by the Import Export Advisory Council and trade interests, as well as the growing needs of the economy for increasing production all-round, the requirements of export promotion and defence and the foreign exchange position.

To fill the gap between domestic demand and actual production, import quotas have been increased for items like steel belt lacing (other than alligator type), certain drugs, medicines and surgical instruments, machine cloth, grinding rollers, arms and ammunition, cartridge cases and some motor vehicle parts, viz. shock absorbers, thin-walled bearings, etc. The basic period has been extended for a few items, including motor vehicle parts, rubber blankets and spare parts of agricultural tractors and tractor-drawn agricultural implements. To meet the needs of industries for maintenance and developmental imports, adequate provisions have been made for licensing both to scheduled and non-scheduled industries, including small-scale industries.

Special efforts will be made to meet the needs of export and defence oriented industries. Larger allocations will be made for raw materials and components for small-scale industries. The needs of the industries for various goods have also been kept in view and new provisions have been made for licensing of specific items like asbestos manufactures, steam, pneumatic and hydraulic packing for all machinery, ready-made boiler packing, ring travellers, sperm oil, blanc fixe, rubber blankets, diamonds for industrial use, carbon black, vanadium pentoxide catalyst, packing engines and boilers, etc., to Actual Users.

Cuts have been imposed on the import of low-priority items or where indigenous production has expanded. The items include highly polished zinc sheets, component parts of knitting, hosiery and embroidery machines, dental surgical instruments, apparatus and appliances, filter paper, some motor vehicle parts, nickel catalyst, silk or artificial silk goods for medical purposes, oxalic acid, rubber chemicals, among others.

The import policy is for the whole year; all applications will be made on yearly basis in the same way as was done during the preceding year. Annual licences, where granted, will be subject to the condition that 50 per cent of their value could be utilised during the first six months. The balance can be utilised in the second half year and after endorsement by the licensing authority, subject to such change as may be decided upon by the Government. Small value annual licences up to Rs. 5,000 to Actual Users will be issued without imposition of the prescribed annual licensing conditions.

Under a new scheme, imports of a few selected consumer goods will be allowed during the year, within a limited ceiling, through wholesale/central stores recognised by the Ministry of Community Development and Co-operation for distribution by such stores to consumers' co-operative stores.

Export Policy

India has been pursuing a policy of progressive relaxation of control over exports in general and of organised export promotion consistent with the internal economy of the country. The Export (Control) Order was last revised in October 1962, when a large number of items were freed from control. Changes made since then are that export of textile cloth and materials thereof of olive green shade, glycerine other than refined glycerine, guar gum with a specified protein content, raw rice bran, groundnut oilcake (expeller variety), groundnuts, and ready-made articles of rayon and man-made fibres and fabrics and woollen yarn, was banned. Export of certain other items such as molasses, tobacco, cardamom, lemon-grass oil and kuth was brought under control to avoid unhealthy competition among the exporters.

Export Promotion

The Third Plan fixed the export target of an average of Rs. 740-760 crores annually. Several measures have been taken to achieve the target. The Ministry of International Trade has been strengthened to look after problems relating to production, incentives, transport and quality control of exportable goods. The Board of Trade was set up in May 1962 to make

a continuous review of export promotion policies in consultation with trade and industry. The Board has constituted separate sub-committees to study questions relating to among others : (i) fair trading practices in internal and external trade, (ii) setting up of free trade zones, (iii) setting up of an export sector, and (iv) reduction of cost of industrial and agricultural products. Vigorous efforts are being made to popularise Indian products abroad through publicity pamphlets and films. Sixteen Export Promotion Councils have been set up for different commodities, namely : (i) cotton textiles, (ii) silk and rayon textiles, (iii) plastics and linoleum, (iv) cashew, (v) tobacco, (vi) sports goods, (vii) chemical and allied products, (viii) shellac, (ix) leather, (x) engineering goods, (xi) mica, (xii) spices, (xiii) marine products, (xiv) processed foods, (xv) basic chemicals, pharmaceuticals and soaps, and (xvi) finished leather and leather manufactures. The Councils conduct surveys of foreign markets, research in better and new uses of commodities, etc. The Export (Quality Control and Inspection) Act was passed in 1963 which empowers Government to notify measures of quality control and pre-shipment inspection on export products. An Export Inspection Advisory Council has been constituted for drawing up an operational programme for quality control.

Government have accepted the recommendations of two Study Groups on credit facilities for exporters, and implemented the main recommendations. The Reserve Bank of India Act and the State Bank of India Act have been amended to facilitate extension of export credit. An Export Credit and Guarantee Corporation has been set up in place of the Export Risks Insurance Corporation. The new Corporation will, besides administering the schemes of export risks insurance, provide supplementary credit facilities for promotion and development of exports and seek to fill the gaps in the system of export credit in the country. Certain tax concessions are allowed on exports. Other export promotion schemes, covering most exportable commodities, include rebate in freight charges, drawback of import duty and import of essential raw materials or capital goods. Imports of raw materials and components are allowed against exports of various products and the procedures for obtaining such import licences have been simplified.

Special efforts have been made to promote exports of such commodities as have a high export potential. The commodities include textiles, manganese and iron ores, molasses, fish and meat and meat products. The measures relate to fixing of export targets and licensing of automatic looms for textiles; decontrol of manganese ore export and reduction in its railway freight, etc.; State trading in iron ore; facilities for storage installation and rail movement for molasses; mechanisation of fishing craft; and standardisation and hygienic processing of meat products.

The Directorate of Exhibitions looks after visual commercial publicity for Indian goods. During 1963-64, India participated in international trade fairs and exhibitions in Budapest (Hungary), Poznan (Poland), Leipzig (GDR), Kuwait (Persian Gulf), book fairs in Washington, New York and West Berlin. The largest ever Indian exhibition abroad was organised in Moscow. India is also participating in the New York World Fair 1964-65, and organising Indian exhibitions in a number of other countries. The 15 Trade Centres and showrooms at important foreign commercial centres have been following a vigorous programme of visual commercial publicity of exportable goods.

TRADE AGREEMENTS

Trade agreements continued to serve as an instrument for reducing the imbalance in the payments situation through expanding trade and increasing export earnings from newer markets and commodities.

During 1963 seven fresh agreements were concluded with the USSR, Czechoslovakia, Bulgaria, Hungary, Jordan, Indonesia and Pakistan.

Under the agreement with the USSR, which provides for all payments to be effected in Indian rupees, the main items of export from India to the Soviet Union would be tea, coffee, spices, cashew-nuts, raw wool, handicrafts, jute manufactures, cotton and woollen fabrics, sports goods, leather footwear, etc. Among the main items of import from the Soviet Union will be rolled iron and steel, oil prospecting and drilling equipment, industrial equipment and machinery, tractors and agricultural machinery, newsprint, petroleum products, fertilisers, etc. The trade agreement with Pakistan, which will remain in force for two years from September 1963 provides for Indian exports to Pakistan of animal and marine products, agricultural products, drugs, pharmaceuticals, chemicals and allied products, engineering and mining products, plastic and sports goods, cotton textiles, among others. The main items of imports from Pakistan are jute and jute manufactures, woollen blankets, carpets and rugs, cotton waste and yarn, etc. The agreement with Indonesia provides for Indian exports of cotton yarn, cotton and woollen piece-goods, jute and jute products, coir yarn and manufactures, engineering goods, machine tools, etc. Imports into India from Indonesia would include, among others, petroleum products, rubber, palm oil, copra, gums and resins and betel nuts.

Apart from the fresh agreements, seven agreements already concluded with Chile, Greece, France, Australia, German Democratic Republic, Tunisia and Morocco were renewed or extended. In January 1963, a protocol was added to the Indo-UAR Trade Agreement of 1953 extending its validity to the end of February 1966. The trade agreement with Iraq, signed in December 1962, was ratified in July 1963. A trade and payments agreement was signed with Poland.

As a result of bilateral discussions, import quotas for textiles, jute manufactures, sewing machines, coir manufactures, handloom fabrics, etc., were obtained from the Federal Republic of Germany, France and Austria.

Draft trade agreements were also exchanged during the year with Brazil and the Republic of Korea, and exploratory discussions were held with Australia for expansion of trade between the two countries.

The number of trade and payments agreements in force at the end of 1963 was 31.

TARIFF

The Indian Tariff (Amendment) Act, 1963, amending the Indian Tariff Act, 1934, provides for automatic levy of counter-vailing duty on imported articles equivalent to the excise duty leviable on similar indigenously manufactured articles in addition to any duty imposed under the Indian Tariff Act or any other law. Under the Finance Act, 1963, a surcharge of 10 per cent was levied on the customs duty, which is specified in the First Schedule to the Tariff Act, 1934, for the financial year 1963-64.

On the recommendations of the Tariff Commission, protection was continued to (i) cotton textile machinery, piston assembly and sericulture industries till the end of December 1966, at the existing rates of protective duties; (ii) antimony industry for five years ending December 1968, subject to review in 1966, the protective duty on antimony (other than crude antimony) being reduced from 45 per cent *ad valorem* or Rs. 88.60 per quintal to 35 per cent *ad valorem* or Rs. 85 per quintal, whichever is higher; (iii) ACSR (aluminium conductor steel reinforced) and AAC (all-aluminium conductor) for three years ending December 1966, the protective duty being reduced from 35 to 25 per cent *ad valorem*; (iv) automobile spark plugs for two years ending December 1965, the protective duty being reduced from 92½ to 77½ per cent *ad valorem*; and (v) power and distribution transformers and electric motors for two years ending

December 1965, at the existing rates of protective duty and extending the scope of protection to cover (a) power and distribution transformers up to 50,000 kva and 220 kv on the HT side, and parts thereof, and (b) electric motors viz. squirrel cage and slip-ring induction motors above 500 h.p. up to 3,000 h.p. and synchronous motors up to 3,000 h.p. and component parts thereof.

From the beginning of 1964, protection was withdrawn in the case of engineers' steel files, bicycles and diesel fuel injection equipment industries.

The price reports submitted by the Tariff Commission were examined and decisions were announced in the case of (i) fixation of fair ex-works selling prices of sheet glass, (ii) fair prices of woollen yarn, fabrics and hosiery manufactures, and (iii) pricing policy of units manufacturing fire-fighting equipment.

SECTION OF TRADE

Exports

The UK and the USA continue to be India's principal buyers. During 1962-63, their respective shares in the trade were 23.71 and 16.98 per cent. Next came the USSR and Japan which absorbed 5.6 and 4.9 per cent, respectively, of India's total exports.

The principal countries to which India exported, and the value of exports to each, for 1960-61, 1961-62, 1962-63 and April-October 1963, are shown below.

TABLE 159
EXPORTS TO PRINCIPAL COUNTRIES

(By sea, air and land)

(value in lakhs of rupees)

Country	1960-61	1961-62	1962-63	April- October 1963
UK	170.69	159.73	162.75	93.49
USA	99.83	115.05	116.59	75.42
USSR	28.78	32.03	38.28	30.31
Japan	34.88	40.45	33.99	32.50
Australia	22.22	15.85	18.82	10.30
Ceylon	18.35	16.98	13.47	9.98
Germany. West	18.94	19.81	15.29	10.17
Canada	17.59	17.58	22.42	14.38
Burma	6.52	5.24	5.13	2.53
UAR (Egypt)	13.37	12.85	13.06	4.81
France	7.62	7.96	8.54	4.58
Argentina	4.52	4.94	8.52	5.17
Sudan	9.48	10.30	9.01	3.75
Singapore	7.08	8.25	9.43	8.46
Netherlands	8.41	7.99	8.95	5.52
Czechoslovakia	7.26	8.05	11.27	9.02
Kenya	4.84	5.31	5.50	3.07
Italy	9.23	9.06	9.52	7.01
Nigeria	5.74	7.05	6.17	2.07
Cuba	7.29	5.18	3.52	2.52
New Zealand	7.40	7.39	6.59	4.53
Pakistan	9.53	9.44	9.40	4.03
Indonesia	3.09	6.80	4.05	90
TOTAL (including other countries) ..	632.42	655.17	686.35	434.46

A closer study of the country-wise figures reveals an element of diversification in the direction of export trade. India's exports to East European countries rose from Rs. 63.5 crores in 1961-62 to Rs. 92.3 crores in 1962-63.

Imports

The principal countries from which India imported, and the value of imports from each, for 1960-61, 1961-62, 1962-63 and April-October 1963 are shown in Table 160.

TABLE 160
IMPORTS FROM PRINCIPAL COUNTRIES
(By sea, air and land) *(value in lakhs of rupees)*

Country	1960-61	1961-62	1962-63	April to October 1963
USA	327.56	255.54	315.26	197.17
UK	217.15	200.15	178.31	98.67
Germany, West	122.52	122.88	96.48	49.72
Iran	29.55	47.35	45.88	33.80
Japan	60.78	59.45	62.75	36.70
Italy	25.97	26.33	21.89	8.89
France	21.13	16.78	12.99	7.48
USSR	15.87	59.94	55.50	37.03
Belgium	15.22	11.86	8.30	4.25
Switzerland	10.38	10.75	10.23	6.82
Australia	17.79	24.17	22.86	9.20
Federation of Malaya	13.50	12.92	10.71	8.61
Saudi Arabia	14.18	18.91	11.72	14.68
Canada	19.86	18.55	14.70	15.62
Czechoslovakia	8.76	15.02	19.71	9.27
Pakistan	14.01	13.86	16.67	5.37
Burma	13.65	11.24	8.71	6.10
Netherlands	10.54	13.25	13.84	7.02
Singapore	10.44	9.00	8.11	3.38
Sweden	11.88	14.34	8.40	6.33
U.A.R. (Egypt)	16.42	12.04	9.78	6.56
Kenya	12.36	11.68	5.66	2.41
Rhodesia and Nuyasaland Federation*	9.92	9.44	2.56	1.70
Sudan	9.41	10.56	17.11	5.54
TOTAL (including other countries)	1,121.62	1,090.06	1,077.09	634.71

As will be seen from the above table, the USA and the UK continued to be the main suppliers, followed by West Germany, Japan and the USSR. The percentage shares of these countries in India's import trade in 1961-62 and 1962-63 were : USA 23.4 and 29.3; UK 18.4 and 16.6; West Germany 11.3 and 8.9 and Japan 5.5 and 5.8 respectively.

PATTERN OF TRADE

Merchandise Exports

India's exports have witnessed expansion and increasing diversification in recent years. The peak level exports of Rs. 686 crores (excluding re-exports) in 1962-63 were higher by Rs. 31 crores as compared to 1961-62; the increase was mainly on account of larger exports of jute bags and fabrics, vegetable oils, tea, unmanufactured tobacco and sugar. Most of the other traditional items, including cotton fabrics, manganese ore and concentrates, textile articles other than clothing, leather, raw cotton, raw wool, crude vegetable materials, iron and steel, coffee, etc., however, suffered decline of varying extent. Exports of new manufactures such as metals and metal products and machinery also declined from over Rs. 21.6 crores in 1960-61 and 1961-62 to Rs. 15.44 crores in 1962-63.

The principal commodities exported by India in 1960-61, 1961-62, 1962-63 and April-October 1963, along with their values, are shown in the table below.**

* Figures for 1960-61 to 1962-63 relate to Northern Rhodesia only.

** For data relating to earlier years, see 'India 1962' p. 338.

TABLE 161
EXPORTS OF PRINCIPAL COMMODITIES
By sea, air and land

(value in lakhs of rupees)

Commodity	1960-61	1961-62	1962-63	April to October 1963
Tea	123.54	122.26	129.19	70.18
Cotton fibres	57.54	49.25	46.54	26.47
Textile fibres (other than cotton)	79.71	87.51	110.57	71.44
Textile articles (other than clothing and footwear)	61.23	65.48	56.56	35.08
Ores of non-ferrous base metals and concentrates	16.49	12.81	9.90	5.21
Leather	24.85	25.33	22.53	14.75
Raw cotton (excluding linters and waste)	8.67	14.32	12.20	6.62
Fresh fruits and nuts (not including oil-nuts)	21.49	20.27	21.40	13.69
Crude vegetable materials, inedible*	15.95	15.36	13.61	9.36
Raw wool	7.72	4.19	6.64	2.84
Sugar	3.28	15.33	18.03	19.72
Iron ore and concentrates	17.03	17.41	19.82	19.44
Tobacco, unmanufactured	14.61	14.05	17.99	18.19
Vegetable oils	8.54	5.82	13.17	5.67
Crude minerals (excluding coal, petroleum, fertiliser materials and precious stones)	12.71	11.96	13.16	6.59
Textile yarn and thread	11.21	13.95	15.22	8.68
Textile floor coverings and tapestries	9.19	8.41	8.57	6.04
Iron and steel	9.68	9.68	2.27	1.07
Coffee	7.22	9.02	7.61	5.33
Hides and skins, raw	10.02	8.79	11.01	5.59
Petroleum products	4.07	3.48	4.13	3.21
Coal, coke and briquettes	3.33	2.42	2.81	1.35
TOTAL (including other items, excluding re-exports)	632.42	655.17	686.35	434.46

Imports

The following table gives the principal imports, with value, for 1960-61, 1961-62, 1962-63 and April-October, 1963.

TABLE 162
IMPORTS OF PRINCIPAL COMMODITIES
(By, sea, air and land)

(value in lakhs of rupees)

Commodity	1960-61	1961-62	1962-63	April to October 1963
Machinery other than electric	203.37	236.99	247.14	157.99
Iron and steel	122.54	107.81	86.65	50.76
Petroleum products	52.07	53.29	57.51	35.09
Transport equipment	72.39	64.62	63.09	30.95
Electric machinery and appliances	57.22	65.91	62.16	46.90
Raw cotton	81.74	62.66	56.91	26.33
Wheat, unmilled	153.20	93.87	91.86	35.02
Petroleum, crude and partly refined	17.36	42.36	30.15	34.05
Chemical elements and compounds	39.34	35.59	37.78	19.66
Manufactures of metals*	20.37	16.74	17.77	9.06
Textile yarn and thread	14.37	13.26	13.06	5.90
Ordnance	2.56	1.22	64	34

*N.E.S. : Nowhere else stated in trade classification list.

TABLE 162 (contd.)

Commodity	1960-61	1961-62	1962-63	April to October 1963
Copper	21,93	23,45	25,24	13,74
Rice	22,44	18,73	21,26	12,14
Medicinal and pharmaceutical products	10,50	11,30	9,24	4,87
Fresh fruits and nuts	15,07	10,15	13,82	5,85
Raw wool and hair	10,41	12,18	12,15	10,34
Paper and paper-board	11,83	15,59	13,06	6,44
Oilseeds, nuts and kernels	11,63	9,43	10,01	4,94
Coal-tar dyestuffs and natural indigo	9,85	11,18	8,92	3,65
Aluminium	7,69	7,93	10,50	3,75
Milk & cream, dried or condensed	4,99	8,43	8,14	4,85
Miscellaneous chemicals and products	9,21	12,14	10,50	5,86
Zinc	9,19	7,35	9,02	6,07
Raw jute and waste	7,64	6,27	3,35	97
Crude minerals (excluding coal, petroleum, fertiliser materials and precious stones)	6,82	7,86	9,01	6,91
Vegetable oils	3,66	5,42	3,96	2,76
TOTAL (including other items)	1,121,62	1,090,06	1,077,09	634,71

The high imports are accounted for by the large requirements of machinery and other equipment for agricultural and industrial development as envisaged in the Plans. At the same time, imports of raw cotton, raw jute and iron and steel have decreased substantially, indicating greater self-sufficiency. Imports of food articles recorded heavy fall in 1961-62 and 1962-63 though they were still of a high magnitude.

TERMS OF TRADE

The following three tables show the index numbers of quantity and price of India's exports and of imports and the terms of trade for the calendar years 1961 and 1962 and for the months of September 1962 and September 1963.

TABLE 163
INDEX NUMBERS OF EXPORTS
(Base 1958=100)

Class of Commodity	Volume index				Unit value index			
	1961	1962	Sept. 1962	Sept. 1963	1961	1962	Sept. 1962	Sept. 1963
Food	109	117	149	137	102	100	101	107
Beverages & tobacco	85	128	165	191	100	85	57	89
Crude materials (inedible, except fuels)	111	104	89	114	105	103	102	83
Mineral fuel and lubricants, etc.	69	77	86	63	91	90	91	80
Animal and vegetable oils and fats	66	132	71	166	104	96	92	94
Chemicals	92	86	118	84	201	211	167	174
Manufactured goods	106	114	114	112	122	114	118	113
Machinery and transport equipment	236	340	423	379	92	79	61	74
Miscellaneous manufactured articles	133	130	136	173	95	101	103	149
General	105	112	121	122	111	106	105	105

Source : Department of Commercial Intelligence and Statistics.

Note : The unit value and quantum indices are of the Paasche and Laspeyre type respectively. Symbolically, the unit value index number P is given by (contd. on next page)

TABLE 164
INDEX NUMBERS OF IMPORTS
(Base 1958=100)

Class of Commodity	Volume index				Unit value index			
	1961	1962	Sept. 1962	Sept. 1963	1961	1962	Sept. 1962	Sept. 1963
Food	43	60	99	70	96	92	85	69
Beverages & tobacco	69	72	209	18	98	103	109	87
Crude materials (inedible, except fuels)	181	168	366	162	93	94	87	93
Mineral fuels and lubricants, etc.	115	147	207	87	93	87	82	87
Animal and vegetable oils and fats	129	195	185	86	99	89	83	89
Chemicals	161	216	181	201	86	71	80	50
Manufactured goods	108	104	88	94	101	99	100	101
Machinery and transport equipment	131	132	125	108	106	106	107	145
Miscellaneous manufactured articles	105	127	159	129	106	100	106	101
General	111	120	144	106	99	94	93	100

Note: For the method of calculation, see footnote to the preceding table.

TABLE 165
TERMS OF TRADE
(Base 1958=100)

	Net Terms of Trade*	Gross Terms of Trade**
1961.. .. .	112	106
1962.. .. .	113	107
September, 1962	113	119
September, 1963	105	87

STATE TRADING

State Trading Corporation

The State Trading Corporation of India Ltd. was established in May 1956 as an entirely State-owned company (authorised capital now Rs. 5 crores). Its aim is to stimulate trade, by filling the many gaps in India's foreign trade structure. Since its inception, the Corporation has been striving to increase India's exports to countries with controlled economies in order to secure from them such items as steel and raw materials without straining the country's foreign reserves. It has been endeavouring to diversify India's trade and find new markets for traditional and non-traditional export items

$$P = \frac{\sum p_n q_n}{\sum p_o q_n}$$

where p_n and q_n are the price (unit value) and quantity in the current period and p_o the corresponding price in the base period.

The quantum index numbers are not computed directly but are derived from the unit value indices (P) as follows:

$$Q = \frac{V_n}{V_o} \times 100$$

where V_o and V_n are the total values of trade in the base and current period respectively and P the unit value index number.

*Ratio of overall export unit value index to similar import index.

**Ratio of overall import quantum index to similar export index.

Note: A favourable movement in the terms of trade is indicated by an increase in the net terms of trade and a decrease in the gross terms of trade.

of India. It has arranged a number of link and barter deals with foreign countries for importing fertilisers, essential capital goods and industrial raw materials in exchange for exports of "hard to sell commodities" from India. It has also arranged bulk contracts and effected equitable distribution of vital raw materials (such as caustic soda, soda ash, newsprint, mercury, camphor, dyestuffs and so on) so that the prices of these items are brought down to reasonable levels. The quantum and timing of the imports have been so fixed as to avoid recurring disruption in supply and to create and maintain conditions favourable for a larger production of these commodities in India. In July 1956, the Corporation was entrusted with the task of acquiring cement from Indian manufacturers, importing it, and distributing it at an equalised price at all railheads in India. With the improvement of internal supply position, it was authorised in 1958 also to export cement. The Corporation continues its price support schemes for purchasing raw jute and seedlac in order to stabilise a certain operational export price. From 1963, it undertook buffer stock operations in lemongrass oil. Recently, it has launched a pilot Export Aid to Small Industries (EASI) scheme for developing exports of products of small and medium scale industries.

The turnover of the Corporation during 1962-63 in the commodities directly traded was Rs. 86.81 crores, showing an increase of 12 per cent over 1961-62. In addition, the Corporation handled indirect trade worth about Rs. 55 crores. The Corporation's direct exports amounted to Rs. 32.59 crores during 1962-63. The important items of export were iron ore, manganese ore, woollen fabrics, shoes, salt, sugar, tobacco, etc. Imports included fertilisers, cotton, newsprint, textile machinery, steel, industrial raw materials, etc. The trade on account of link or barter deals amounted to Rs. 51.22 crores during 1962-63 as compared to Rs. 45.88 crores during 1961-62.

Minerals and Metals Trading Corporation

In April 1963 the Government of India decided to bifurcate the State Trading Corporation to establish a second corporation called the Minerals and Metals Trading Corporation of India Ltd. The new Corporation started functioning from October 1963 as a company registered under the Companies Act, and all work relating to minerals and metals as well as assets and liabilities on this account were transferred from the State Trading Corporation to the Minerals and Metals Trading Corporation. The main objects of the new Corporation, which is a fully Government-owned company with an authorised capital of Rs. 5 crores and a subscribed capital of Rs. 2 crores, are : (i) to organise and undertake exports of mineral ores and concentrates and imports of metals, etc., and (ii) to explore and develop new markets for export of minerals, ores and concentrates with a view to diversifying and expanding their exports.

The trade handled by the Corporation is expected to reach the level of Rs. 250 crores (Rs. 150 crores of exports and Rs. 100 crores of imports) per year by 1970.

Administrative measures have been adopted to achieve co-ordination between the State Trading Corporation and the Minerals and Metals Trading Corporation.

INTERNAL TRADE

Considering the vastness of the country, its varied climate and diverse natural resources, it is natural that the internal trade of India is many times larger than its external trade. According to an estimate in the report of the National Planning Committee's Sub-committee on Trade, the value of the country's internal trade in 1947 was about Rs. 7,000 crores as compared to about Rs. 350 crores for external trade.

The internal trade of India can be classified under the broad heads of (i) rail-borne trade, (ii) river-borne trade, (iii) coasting trade, (iv) trade borne on other craft—by lorry, carts, etc., and (v) trade by air. Complete and precise data about total internal trade cannot be had, particularly because reliable statistics of trade by air and other craft such as lorry, carts, country-craft, are not available.

RAIL AND RIVER-BORNE TRADE

Statistics of rail and river-borne trade are based on the invoices of the railway and steamer companies and are recorded on 'import' basis. For the purpose of these statistics, India is divided into a number of trade blocks*, roughly representing the States of the Indian Union. The chief port towns of Calcutta, Bombay, Madras and Cochin are constituted as separate trade blocks. Similarly, the less important ports in Madras and other places are grouped as 'Other Ports' each of which is treated as a separate trade block.

The following table shows the movement of selected articles by rail and river between different trade blocks, the internal trade of each block being excluded.

TABLE 165
RAIL AND RIVER-BORNE TRADE—SELECTED ARTICLES

Item	(In thousand quintals)				
	1951-52	1955-56	1960-61	1961-62	1962-63**
Coal & coke ..	20,20,35	21,66,34	31,47,96	29,32,00	32,34,44
Raw cotton***	25,63	29,00	37,19	39,82	30,00
Cotton piece-goods	24,81	32,60	26,43	23,04	22,76
Rice (not in husk)	83,31	1,64,07	2,22,83	2,11,97	2,05,78
Wheat ..	1,94,64	82,74	3,06,42	2,74,37	2,85,10
Raw jute ..	47,13	35,39	40,14	44,64	60,44
Iron & steel products ..	1,73,69	1,91,65	3,70,25	4,00,75	4,85,69
Oilseeds ..	80,37	94,55	95,09	82,86	95,88
Salt ..	1,26,39	1,24,08	1,35,39	1,51,01	1,67,34
Sugar (excluding khandasari sugar)	62,40	82,93	91,06	86,62	1,16,26

Source : Department of Commercial Intelligence and Statistics, Calcutta.

Note : The above statistics relate to quantities only, as value figures are not recorded in the railway and steamer companies' invoices. Besides, the trade carried by only two steamer companies between three trade blocks is recorded. Further, non-trade freight movements are also included because of the difficulty in isolating them.

COASTING TRADE

For purpose of statistics, the Indian coast has been divided (from April 1963) into 12 maritime blocks corresponding to the maritime States of India viz., (i) West Bengal, (ii) Orissa, (iii) Andhra Pradesh, (iv) Madras, (v) Kerala, (vi) Mysore, (vii) Maharashtra, (viii) Gujarat, (ix) Andaman and Nicobar Islands, (x) Laccadive, Minicoy and Amindivi Islands, (xi) Pondicherry, and (xii) Goa.

The coasting trade is recorded under two broad heads (i) Internal Trade, i.e., trade amongst the ports within the same maritime block, and (ii) External Trade, i.e., trade between one maritime block on the one hand and all other maritime blocks on the other.

*Up to March 1962, India was divided into 29 trade blocks; the number was increased to 31 from April 1962, consequent to bifurcation of Bombay State.

**Provisional.

***Figures relate to the cotton year ending August of the fiscal year.

The table below shows the value of the coastwise trade of India in the years 1955-56, 1960-61, 1961-62 and 1962-63.

TABLE 167
COAST-WISE TRADE

(value in lakhs of rupees)

	1955-56	1960-61	1961-62	1962-63
<i>Imports</i>				
Indian merchandise ..	164,54	209,89	243,73	240,16
Foreign merchandise ..	13,70	6,61	3,46	2,62
Treasure ..	—	—	—	—
TOTAL IMPORTS ..	178,24	216,50	247,19	242,78
<i>Exports</i>				
Indian merchandise ..	143,77	215,03	262,74	255,95
Foreign merchandise ..	15,90	7,85	7,28	4,79
Treasure ..	6	—	1	—
TOTAL EXPORTS ..	159,73	222,88	270,03	260,74
TOTAL TRADE ..	337,97	439,38	517,22	503,52

Of the import trade worth Rs. 243 crores and export trade of Rs. 261 crores in 1962-63, Rs. 235 crores and Rs. 250 crores, respectively, related to external trade as among the blocks and the remaining to the internal trade within the blocks themselves. Imports exceeded exports during the period 1955-56 to 1959, but the trend has reversed from 1960-61.

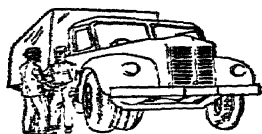
METRIC WEIGHTS AND MEASURES

To establish a uniform system of weights and measures throughout the country, reform has been introduced gradually, since the passing of the Standards of Weights and Measures Act, 1956, through a phased programme covering different industries, public undertakings and regions. In specified areas in all the States and Union Territories the use of metric weights was introduced in 1958 with a transition period of two years, during which the metric weights were used alongside indigenous weights. Since October 1960, however, the use of metric weights became compulsory in these areas. Selected industries such as cotton, jute, iron and steel, engineering, chemicals, cement, paper, petroleum, *vanaspati*, salt, etc., also changed over. In Government departments such as the Railways, Posts and Telegraphs, Customs, etc., the use of metric weights was introduced.

During 1962, the use of metric weights and length measures was made obligatory; the system was also extended to the motor transport industry and to the levy of excise duty on alcohol. The use of metric units for land areas was authorised from October 1962, with a transitional period of three years during which the existing units would also be recognised. The use of metric capacity measures (litre and its secondary units) became compulsory from April 1963, throughout the country.

By now the metric system has been almost fully adopted in the country in trade, freight charges, levy of taxes and duties, etc. The system has come into use in education, general and technical, including engineering and medical courses. Preparatory work in regard to its adoption in the design of products and equipment of industry has also been done and metric standards have been published. The actual adoption of design and standards by industry will, however, have to be spread over some years.

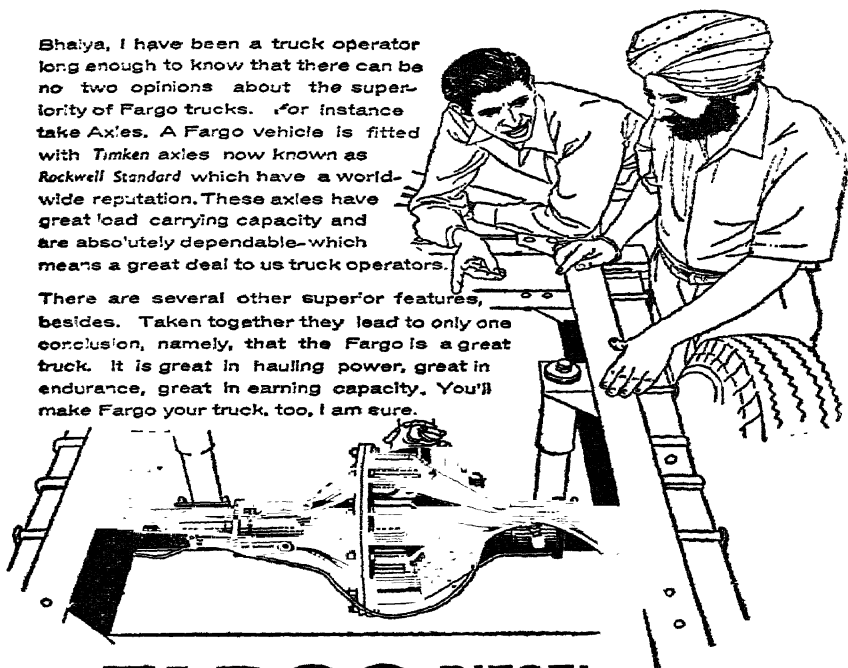
Earlier, Weights and Measures (Enforcement) Organisations throughout the country were strengthened to enforce the new system. Steps were taken to augment the production of metric weights and measures of length and capacity. Manufacturers were given help in procuring scarce raw materials like brass, galvanised sheets and pig iron.



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CHAPTER XXII

TRANSPORT

RAILWAYS

India's railway system with a route kilometrage of 57,404 is the second largest individual railway network in the world and the biggest nationalised undertaking in the country. More than 48 lakh persons and 4.9 lakh tons of goods were carried, on an average, by the railways daily in 1962-63. The capital-at-charge of the railways, at the end of 1962-63, stood at Rs. 1,904 crores and the gross earnings at Rs. 569.75 crores. They employed 12,17,557 persons and paid Rs. 233.09 crores in wages and salaries.

Progress

The first railway line in India of 32 kilometres was opened on April 16, 1853. The progress made by the railways since 1947-48 is indicated in Tables 168 and 169.

TABLE 168
PROGRESS OF ALL INDIAN RAILWAYS

(in lakhs of rupees)

Year	Kilo- metres	Capital- at- charge	Gross earnings	Working expenses	Net earnings
1947-48	54,814	742,20	183,69	163,94	19,75
1950-51	54,845	838,18	264,62	214,39	50,23
1955-56	55,900	975,91	317,51	260,17	57,34
1960-61	56,963	1,527,83	459,38	361,88	97,50
1961-62	57,089	1,690,07	502,29	392,35	109,93
1962-63	57,404	1,903,61	569,75	431,66	138,08

TABLE 169
RAILWAY TRAFFIC
(For all Indian Railways)

Year	Passengers originating (lakhs)	Passenger earnings (Rs. lakhs)	Goods originating (lakh tonnes)	Goods earnings (Rs. lakhs)
1950-51	130,78	99,22	9,38	139,77
1955-56	129,74	108,75	11,71	177,92
1960-61	161,59	132,52	15,76	281,26
1961-62	171,21	151,80	16,19	300,81
1962-63	177,00	170,18	18,01	343,40

Railway Zones

The 37 railway systems, which existed in India before August 1949, have been grouped into eight zones with a view to effecting economy and efficiency in administration. Some details regarding the zones are given in Table 170.

Certain narrow-gauge feeder railways (total length 662 km), owned and operated by private companies, were not included in the reorganisation scheme, although under the Railway Companies (Emergency Provisions) Act, 1951, Government assumed powers to ensure their efficient operation in the public interest.

TABLE 170
RAILWAY ZONES

Zone	Date of creation	Consisting of	Headquarters	Track width*	Mean route kilometrage worked (March 31, 1963)
Southern ..	April 14, 1951	Madras and Southern Mahratta, South Indian and Mysore Railways.	Madras	B.G. M.G. N.G.	3,153.58 6,669.23 154.61
Central ..	November 5, 1951	Great Indian Peninsular, Nizam's State, Scindia and Dholpur Railways.	Bombay	B.G. M.G. N.G.	6,148.99 1,545.53 1,166.74
Western ..	November 5, 1951	Bombay Baroda & Central India, Saurashtra, Kutch, Rajasthan and Jaipur Railways.	Bombay	B.G. M.G. N.G.	2,855.36 5,985.64 1,222.74
Northern ..	April 14, 1952	Eastern Punjab, Jodhpur, Bikaner Railway and the three upper divisions of the East Indian Railways.	Delhi	B.G. M.G. N.G.	6,807.44 3,296.63 260.44
North-Eastern	April 14, 1952	Oudh and Tirhut, Assam Railways and Fatehgarh district of old Bombay Baroda & Central India Railway.	Gorakhpur	B.G. M.G.	52.47 4,914.83
North-East Frontier	January 15, 1958		Pandu	B.G. M.G. N.G.	177.99 2,645.44 83.63
Eastern ..	August 1, 1955	East Indian (minus the three upper divisions).	Calcutta	B.G. N.G.	3,915.63 27.58
South-Eastern	August 1, 1955	Bengal Nagpur Railway.	Calcutta	B.G. N.G.	4,591.52 1,404.61

Railway Finances

Railway finances were separated from general finances in 1925, the railways contributing to the general revenues according to a fixed formula. In December 1949, it was decided that during the quinquennium beginning 1950-51, the railways should pay a guaranteed dividend of 4 per cent on the capital-at-charge at the end of each penultimate year. The revised Financial Convention, which became applicable after 1955-56, prescribed the same rate of payment except that on new lines a moratorium was to be granted during construction and for the five years to follow. On the recommendation of the Railway Convention Committee, 1960, dividend was increased to 4½ per cent for the five years 1961-66. Since April 1963, it was further increased by ½ to 4½ per cent as the contribution of the railways to the national defence effort during the emergency. In addition, the railways are paying a lump sum of Rs. 12.5 crores to the general exchequer, for

*Track width : B.G. 1.67 metres; M.G. 1 metre; N.G. 0.762 and 0.7610 metre.

transfer to the State, in lieu of passenger tax merged with fares since April 1961.

The following table gives an outline of the financial results of working of Government Railways since 1955-56.

TABLE 171
RAILWAY FINANCES

	<i>(in crores of rupees)</i>					
	1955-56 (Actuals)	1960-61 (Actuals)	1961-62 (Actuals)	1962-63 (Actuals)	1963-64 (Revised)	1964-65 (Budget)
Passenger earnings—						
Upper	12.85	15.18	17.55	20.36	21.55	22.01
Third	94.86	116.41	133.33	148.82	158.48	161.99
Other coaching earnings	20.87	27.21	29.10	32.54	34.80	35.00
Goods earnings	180.28	286.14	306.90	349.52	391.66	432.00
Other sundry earnings	6.81	12.63	13.61	16.68	16.88	18.00
Total earnings	315.67	457.57	500.49	567.93	623.37	669.00
Suspense	0.62	—0.77	+0.01	—1.14	—1.15	—1.00
Gross traffic receipts	316.29	456.80	500.50	566.79	622.22	668.00
Ordinary working expenses	212.95	313.15*	325.33	362.38	393.34	414.68
Net miscellaneous expenditure	7.73	10.69	10.24	13.95	15.96	17.08
Appropriation to depreciation reserve fund	45.00	45.00	65.00	67.00	80.00	83.00
Payment to worked lines	0.27	0.09	0.18	0.14	0.14	0.14
Total working expenses	258.22	368.93*	390.51	429.52	473.48	516.82
Net railway revenue	50.34	87.87	99.75	123.32	132.78	134.10
Dividend to general revenues	36.12	55.86	75.35*	81.26*	95.03*	103.23*
Net surplus	14.22	32.01	24.40	42.06	37.75	30.83
Operating ratio	81.6%	78.42%	78.00%	75.8%	76.1%	77.47
Capital-at-charge	968.98	1,520.87	1,682.98	1,896.81	2,136.40	2,389.44

DEVELOPMENT UNDER THE PLANS

The main problem of the railways in the initial years of the planning era has been that of rehabilitation and replacements. First created by the economic depression, it was later accentuated by the severe strain of war and partition. Under the First Five Year Plan, Rs. 423.73 crores were spent on rehabilitation and expansion of railways with emphasis on rehabilitation.

During the Second Plan, with a railway allocation of Rs. 1,121.5 crores**, the Railways were expected to (i) increase passenger transport capacity by 15 per cent, (ii) raise goods traffic to 16,20 lakh tons, (iii) add 1,200 miles of newlines, double 1,300 miles of track and electrify 880 miles, and (iv) increase the number of locomotives to 10,600, coaches to 28,900 and wagons to 35,41,000.

*This includes Rs. 12.50 crores to be contributed to the General Revenues in lieu of merger of passenger tax with passenger fare.

**Inclusive of Rs. 15 crores allotted for the Post and Telegraph and Power Supply authorities.

The revised programme of railway development during the Third Plan period, involving an outlay of about Rs. 1,477 crores, aims at (i) creating capacity for 26.40 lakh tonnes of goods traffic by 1965-66; (ii) increase of passenger traffic by 15 per cent; (iii) acquisition of 2,070 locomotives, 8,601 coaches and 1,57,246 wagons; (iv) doubling of 3,024 km. of track; (v) renewal of 8,000 km of track; (vi) electrification of 2,400 km; (vii) construction of 2,667 km of new lines and (viii) construction of 54,000 new staff quarters.

New Construction and Works

During the First Plan, 430 miles of dismantled lines were restored, 380 miles of new lines constructed and 46 miles of narrow gauge lines converted into metre gauge. Also, 454 miles of new lines were under construction. 52 miles were being converted into broad gauge and surveys for over 2,000 miles of new lines were in progress. During the Second Plan, 408 miles of broad gauge and 382 miles of metre gauge new rail lines were opened to traffic and 1,006 miles of broad gauge and 251 miles of metre gauge lines were in various stages of construction. Also 6,223 miles of rail renewals and 7,102 miles of sleeper renewals were completed. During the first two years of the Third Plan, 848 km of new lines were opened to traffic, 282 km of metre gauge lines were converted to broad gauge, and 3,662 km of rail renewals and 4,108 km of sleeper renewals were completed.

Rolling Stock

During the First Plan period, 496 locomotives, 4,351 coaches and 41,192 wagons were placed on line. During the Second Plan 2,192 locomotives, 7,515 coaches and 97,994 wagons were acquired on additional replacement account. Seven hundred and five locomotives, 3,326 new coaching vehicles and 45,081 new wagons were placed on line during the first two years of the Third Plan.

Workshops, Plant and Machinery

The remodelling and expansion of a large number of running sheds and locomotives, carriage and wagon workshops were undertaken during the Second Plan. A steel foundry with an optimum capacity of 10,000 tons of castings per annum, set up at the Chittaranjan Locomotive Works, went into production in November 1963, and is expected to reach its full capacity by the end of 1966. The Chittaranjan Locomotive Works which has already delivered over 1,700 steam locomotives and has placed in service on the Central Railway twenty-one 3,600 hp. broad gauge DC electric locomotives has also started producing the most modern 25 KV AC locomotives. Seventy-two broad gauge AC electric multiple unit trailer coaches were made available by the Integral Coach Factory for suburban services till the end of March 1963. The production of coach shells at this factory is now of the order of 600 per year. About 30 coaches per month are being furnished and equipped at the furnishing unit of the factory.

Electrification

Electric traction, first introduced in 1925, is confined to areas near Bombay, Madras and Calcutta. By March 31, 1962, 1,285.55 km were electrified; 331 route kilometres of railway lines were electrified during 1962-63.

Dieselisation

Diesel traction is being adopted on a progressively increasing scale. There are 454 diesel locomotives at present, including six shunting locos equipped with the "Suri Transmission". The Diesel Locomotive Works at Varanasi which is to manufacture 150 broad gauge diesel locomotives per annum, turned out the first locomotive in January 1964.

Amenities for Railway Users

Of the improvements carried out during recent years to offer better travel conditions to passengers, particularly third class passengers, mention may be made of the following:

- (i) safe and relaxed travel—at a cost which is perhaps the lowest in the world—in all-steel light-weight coaches;
- (ii) reservation of coaches for long-distance travel in important trains and reservation of accommodation in accordance with distances in certain trains;
- (iii) introduction of new trains and extension of the runs of existing trains;
- (iv) introduction of new 75-berther sleeping coaches over the broad gauge and 64-berthers over the metre gauge in certain trains for passengers travelling over 800 km without levy of any surcharge;
- (v) running of all-third class 'Janata' trains and vestibuled air-conditioned trains;
- (vi) improvement of catering facilities;
- (vii) improvement of drinking water facilities, provision of fans, waiting halls, new or improved over-bridges and new or improved platforms; and
- (viii) camping coach facility at certain stations.

Staff Welfare

As against an annual average of a little over Rs. 4 crores spent on the construction of new quarters and staff welfare measures during the First Plan period, Rs. 10 crores per annum were spent during the Second Plan period. During the first two years of the Third Plan, expenditure on staff welfare exceeded Rs. 11 crores per annum.

While 40,000 staff quarters were constructed during the First Plan period, 57,000 were built during the Second Plan period. Provision has been made for 54,000 new quarters in the Third Plan, in addition to those to be provided under composite schemes relating to workshops, yards and lines. 14,562 quarters were constructed during 1962-63.

At the end of 1962-63, there were 83 hospitals and 526 health units/ dispensaries. A number of chest clinics for domiciliary and out-door treatment of T. B. patients have been established in addition to expansion of facilities by way of additional beds. During 1962-63, 1,00,475 pupils were receiving instruction in 715 schools. For the benefit of children of railway workers studying in places away from their parents, 12 subsidised hostels have been set up. Mobile libraries have been formed for the use of staff posted at wayside stations. The first mobile library was inaugurated on the North-Eastern Railway in December 1958.

In December 1957, it was decided to offer the choice of a pension scheme to all railway employees. A scheme of large-scale upward re-distribution of posts calculated eventually to benefit 1,70,000 railwaymen in non-gazetted cadres was announced in February 1957. Steps are also being taken to explore avenues for quicker promotion of class IV staff. The Class IV Staff Committee's recommendations have been accepted by Government.

OPERATING STATISTICS

Passenger Traffic and Earnings

The salient features of passenger traffic and earnings therefrom on all Indian railways during 1955-56, 1960-61 and 1961-62 are shown in Table 172.

TABLE 172

PASSENGER TRAFFIC AND EARNINGS

	1955-56	1960-61	1961-62	1962-63
Number of passengers (in hundredreds)	129,73,55.0	161,38,86.2	171,23,70.0	177,03,04.0
A.C.	85.8	1,44.4	1,58.0	1,83.0
First Class	1,90,30.1	3,46,00.1	4,11,47.0	4,61,17.0
Second Class	1,68,75.2	1,11,36.9	1,11,12.0	1,10,14.0
Third Class	126,13,63.9	156,80,64.8	165,99,53.0	171,29,96.0
Passenger miles km* (in thousands)	3,978,32.87	7,806,06.58	8,228,39.79	8,449,77.07
A.C.	5,12.79	10,99.85	11,65.86	13,04.38
First Class	77,38.58	193,29.67	211,23.32	228,97.77
Second Class	124,36.83	179,87.12	181,05.21	183,40.25
Third Class	3,701,44.67	7,421,89.94	7,824,45.40	8,624,34.67
Earnings from passengers (in thousand rupees)	108,75.48	132,51.76	151,87.21	170,17.62
A.C.	87.51	1,18.08	1,38.15	1,61.42
First Class	5,88.01	8,33.72	9,81.59	11,79.42
Second Class	6,12.22	5,74.21	6,36.64	6,97.26
Third Class	95,87.44	118,33.98	134,55.44	149,79.31
Average rate charged per passenger	pies per mile		P per km	
A.C.	32.8	10.7	11.8	12.4
First Class	14.6	4.31	4.65	5.15
Second Class	9.45	3.19	3.52	3.80
Third Class	4.97	1.59	1.72	1.86

Goods Traffic and Earnings

The goods traffic carried and earnings therefrom on all Indian railways are shown in the following table.

TABLE 173

GOODS TRAFFIC AND EARNINGS*

	1955-56	1960-61	1961-62	1962-63
Tons/tonnes of goods carried (in thousands)	11,52,73	15,76,43	16,18,55	18,00,90
Revenue earning traffic (in thousand tons/tonnes)	9,19,65	12,12,00	12,69,66	14,07,26
Non-revenue earning traffic (in thousand tons/tonnes)	2,33,08	3,64,43	3,48,89	3,93,64
Net ton miles/tonne km (in thousands)	3,647,18,50	8,775,84,97	9,129,23,55	10,076,55,99
Revenue earning traffic (in thousand ton miles/tonne km)	3,088,17,87	7,241,18,18	7,542,69,09	8,321,21,64
Non-revenue earning traffic (in ton miles/tonne km.)	559,00,63	1,534,66,79	1,586,54,46	1,756,34,35
Average miles/ km a ton/tonne of goods was carried	316.4	556.7	564.05	559.5
Revenue earning traffic (in miles/km)	335.8	597.5	594.1	591.3
Non-revenue earning traffic (in miles/kms.)	239.8	421.1	454.7	445.9
Earnings from goods carried (in thousand rupees)	177,92,19	281,25,56	300,81,17	343,39,63
Average rate charged per ton/tonne of goods per mile/km	11.1 (pies)	3.88 (P)	3.99 (P)	4.13 (P)

*The 1955-56 figures are in miles, tons and ton-miles while those for 1960-61, 1961-62 and 1962-63 are in km., tonnes, and tonne-km.

The principal commodities carried by Government railways are shown in the following table.

TABLE 174
PRINCIPAL COMMODITIES CARRIED

(in thousands)

	1955-56 (tons)	1960-61 (tonnes)	1961-62 (tonnes)	1962-63 (tonnes)
Coal	3,53.37	5,03.96	5,38.92	6,14.00
Cement	39.56	65.48	67.08	69.00
Iron and steel*	36.55	75.88	81.32	94.00
Metallic ores (other than manganese ore)	43.73	1,11.40	1,26.07	1,52.95
Manganese ore	13.78	12.30	12.50	12.15
Foodgrains	90.44	1,26.59	1,22.33	1,23.00
Raw jute	5.12	6.44	7.66	9.31
Tea	2.58	2.50	2.41	2.04
Paper and paper products	2.56	4.42	4.60	4.65
Jute manufactures	2.90	2.63	2.49	2.31
Raw cotton	7.39	5.36	4.12	4.34
Cotton textiles	5.48	3.80	3.79	3.48
Oil seeds	17.66	15.17	13.34	14.39
Sugarcane	34.08	32.37	33.71	28.85
Sugar	13.36	14.88	14.60	16.0
Salt	18.58	19.81	22.22	24.00

Punctuality Ratio

The punctuality ratio** on Government railways is shown below.

TABLE 175
PUNCTUALITY RATIO

	All including electric multiple unit trains	Mail and important through trains	Mixed trains	Suburban trains	Other passenger trains
Broad Gauge					
1955-56 ..	77.99	77.84	85.33	84.57	74.66
1960-61 ..	85.75	79.67	87.91	86.64	79.63
1961-62 ..	84.48	79.04	85.15	84.46	76.93
1962-63 ..	85.27	80.07	88.53	92.89† 77.78 94.05†	79.56
Metre Gauge					
1955-56 ..	75.14	61.96	75.81	74.71	71.70
1960-61 ..	82.58	82.94	84.98	93.09	78.31
1961-62 ..	81.26	80.04	85.67	82.33† 97.90	76.68
1962-63 ..	83.29	81.22	87.29	78.09 96.29†	79.93

FARES AND FREIGHT

The assumption of "common carrier liability" by the Indian Railways on January 1, 1962, in respect of goods entrusted to them brought about a fundamental change in the sphere of railways' responsibility. Suitable steps have been taken to meet the challenge of the increased responsibility and ensure expeditious disposal of claims preferred.

*Includes machinery, etc.

**Percentage of passenger and mixed trains not losing time to the total number of trains on all Government railways.

†Electric multiple unit trains of the Central, Eastern and Western Railways including non-suburban electric trains between Kalyan-Karjat and Kasara in case of broad gauge and all electric multiple units of Southern Railway in case of metre gauge.

The railways switched over to the decimal coinage from September 15, 1957, in the case of passenger fares and from October 1, 1958, in the case of freight on goods, parcels and other traffic. The commercial departments of the railways have adopted the metric system of weights and measures from April 1, 1960. The unit of weight for the purpose of charge from that date is a quintal or 100 kg and the distance between stations is reckoned in kilometres instead of in miles.

Passengers fare and rate tables showing the fares or rates for various distances from 1 to 5,000 km have been printed and are available for arriving at the fare or freight rates.

Following the recommendations made by the Railway Freight Structure Inquiry Committee, the revised railway freight structure came into force with effect from October 1, 1958.

ADMINISTRATION

The responsibility for the overall control and administration of the railways vests in the Railway Board, which was first set up in 1905. The Board now consists of a Chairman, who is *ex-officio* Secretary-General to the Union Railway Ministry, the Financial Commissioner and three Members, each in charge of Transport, Mechanical and Engineering, who are of the status of Secretaries to the Union Railway Ministry.

Constant and close consultation between the public and the railway administration is secured through the following committees: (i) Divisional Regional Railway Users' Consultative Committees; (ii) Zonal Railway Users' Consultative Committee at the headquarters of each railway zone; and (iii) the National Users' Consultative Council at the Centre.

ROADS

Table 176 shows the progress of road construction from 1947 to 1961.

TABLE 176
PROGRESS OF ROAD CONSTRUCTION

			(in miles)			
			1947	1951	1956	1961
Surfaced Roads	..	..	90,630	97,567	1,13,725	1,46,513
Unsurfaced Roads	..	..	1,50,602	1,50,945	1,95,931	2,94,113
TOTAL	..	..	2,41,232	2,48,512	3,09,656	4,40,626

During the first two years of the Third Plan, an estimated 11,000 miles of surfaced roads were constructed.

In 1947, the Central Government assumed responsibility for the construction and maintenance of certain roads selected by them as suitable for inclusion in the system of national highways. These were statutorily declared as national highways under the National Highways Act, 1956. State highways, district and village roads are the responsibility of the State Governments.

National Highways

On April 1, 1947, when the Centre took over the liability for the national highways, approximately 1,600 miles of road and thousands of culverts and bridges (including about 150 major bridges) did not exist. Missing road links which accounted for 1,600 miles have since increased to about 1,900 due to addition of new roads to the national highway system. The progress on national highways since then is indicated in Table 177.

TABLE 177
PROGRESS OF NATIONAL HIGHWAYS

	Missing links constructed (in miles)	Major bridges constructed	Improvement of existing sections (in miles)	Widening of carriage-way (in miles)
April 1, 1947 to March 31, 1956	746	34	3,900	
April 1, 1956 to March 1961 ..	640	40	3,500	2,500
Third Plan targets ..	300	85	1,200	1,000
Progress made during the first three years of the Third Plan	120	26	950	400

The national highway mileage in the States and Territories of the Indian Union after reorganisation of States is as follows.

TABLE 178
NATIONAL HIGHWAYS (STATE TERRITORY-WISE)*

State/Union Territory	Miles
Andhra Pradesh	1,412
Assam	837
Bihar	1,167
Gujarat	676
Jammu & Kashmir	338
Kerala	260
Madhya Pradesh	1,669
Madras	1,050
Maharashtra	1,487
Mysore	816
Orissa	852
Punjab	784
Rajasthan	782
Uttar Pradesh	1,455
West Bengal	894
Delhi	45
Himachal Pradesh	200
Manipur	132
Nagaland	69

The roads declared as National Highways under the National Highways Act, 1956, are shown in Table 179.

TABLE 179
NATIONAL HIGHWAYS

(Note: Figures in brackets represent the length of the highway in miles)

Serial No.	National Highway No.	Description of national highway
1	1	Connecting Delhi, Ambala, Jullundur and Amritsar and proceeding to the border between India and Pakistan. (282)
2	1A	Connecting Jullundur, Madhopur, Jammu, Banihal, Srinagar, Baramula and Uri. (414)
3	2	Connecting Delhi, Mathura, Agra, Kanpur, Allahabad, Varanasi, Mohania, Barhi and Calcutta. (934)
4	3	Connecting Agra, Gwalior, Shivpuri Indore, Dhulia, Nasik, Thana and Bombay. (725)
5	4	Starting from its junction near Thana with the highway specified in serial No. 4 and connecting Poona, Belgaum, Hubli, Bangalore Ranipet and Madras. (772)

*Sikkim, which is included in the system, has a national highway mileage of 39, which is shown as part of the highways in West Bengal.

TABLE 179 (contd.)

Serial No.	National Highway No.	Description of national highway
6	5	Starting from its junction near Baharagora with the highway specified in serial No. 7 and connecting Cuttack, Bhubaneswar, Visakhapatnam, Vijayavada and Madras. (933)
7	6	Starting from its junction near Dhulia with the highway specified in serial No. 4 and connecting Nagpur, Raipur, Sambalpur, Baharagora and Calcutta. (1,028)
8	7	Starting from its junction near Varanasi with the highway specified in serial No. 3 and connecting Mangawan, Rewa, Jabalpur, Lakhnadon, Nagpur, Hyderabad, Kurnool, Bangalore, Krishnagiri, Salem, Dindigul, Madurai and Cape Comorin. (1,474)
9	8	Connecting Delhi, Jaipur, Ajmer, Udaipur, Ahmedabad, Baroda and Bombay. (892)
10	8A	Connecting Ahmedabad, Limbdi, Morvi and Kandla. (236)
11	8B	Starting from its junction near Bamanbhere with the highway specified in serial No. 10 and connecting Rajkot and Porbandar. (129)
12	9	Connecting Poona, Sholapur, Hyderabad and Vijayavada. (498)
13	10	Connecting Delhi and Fazilka and proceeding to the border between India and Pakistan. (252)
13A	11	Connecting Agra, Jaipur and Bikaner. (364)
13B	12	Connecting Jabalpur, Bhopal and Bhaora. (265)
13C	13	Connecting Sholapur and Chitradurga. (307)
14	22	Connecting Ambala, Kalka, Simla, Narkanda, Rampur and Kalpa and proceeding to the border between India and Tibet near Shipki-La. (287)
15	24	Connecting Delhi, Bareilly and Lucknow. (274)
16	25	Connecting Lucknow, Kanpur, Jhansi and Shivpuri. (199)
17	26	Connecting Jhansi and Lakhnadon. (248)
18	27	Connecting Allahabad with the highway specified in serial No. 8 near Mangawan. (59)
19	28	Starting from its junction near Barauni with the highway specified in serial No. 23 and connecting Muzaffarpur, Pipra, Gorakhpur and Lucknow. (356)
20	28A	Starting from its junction near Pipra with the highway specified in serial No. 19 and connecting Sagauli and Raxaul and proceeding to the border between India and Nepal. (42)
21	29	Connecting Gorakhpur, Gazipur and Varanasi. (123)
22	30	Starting from its junction near Mohania with the highway specified in serial No. 3 and connecting Patna and Bakhtiyarpur. (144)
23	31	Starting from its junction near Barhi with the highway specified in serial No. 3 and connecting Bakhtiyarpur, Mokameh, Purnea, Dalkhola, Siliguri, Sivok and Cooch-Behar and proceeding to its junction with the highway specified in serial No. 28 near Pandu. (595)
24	31A	Connecting Sivok and Gangtok. (58)
24A	31B	Starting from North Salmara to its junction with N.H. No. 37 near Goalpur. (110)
24AA	32	Starting from its junction near Gobindpur with N.H. No. 2. (112)
25	33	Starting from its junction near Barhi with the highway specified in serial No. 3 and connecting Ranchi and Tatanagar and proceeding to its junction with the highway specified in serial No. 7 near Baharagora. (220)
26	34	Starting from its junction near Dalkhola with the highway specified in serial No. 23 and connecting Berhampore, Barasat and Calcutta. (277)
27	35	Connecting Barasat and Bangaon and proceeding to the border between India and Pakistan. (38)
28	37	Starting from its junction near Goalpara with the highway specified in serial No. 23 and connecting Gauhati, Jorabat, Kamargaon, Makum and Saikhoa Ghat. (437)
29	38	Connecting Makum, Ledo and Lekhapani. (34)
30	39	Connecting Kamargaon, Imphal and Palel and proceeding to the border between India and Burma. (274)
31	40	Connecting Jorabat and Shillong and proceeding to the border between India and Pakistan near Dawki. (100)

TABLE 179 (concl'd.)

Serial No.	National Highway No.	Description of national highway
32	42	Starting from its junction near Sambalpur with the highway specified in serial No. 7 and proceeding via Angul to its junction with the highway specified in serial No. 6 near Cuttack. (163)
33	43	Connecting Raipur and Vizianagaram and proceeding to its junction with the highway specified in serial No. 6 near Vizianagaram. (348)
34	45	Connecting Madras, Tiruchirapalli and Dindigul. (242)
35	46	Connecting Krishnagiri and Ranipet. (82)
36	47	Connecting Salem, Coimbatore, Trichur, Ernakulam, Trivandrum and Cape Comorin. (382)
37	47A	Starting from its junction near Trichur with the highway specified in serial No. 36 and connecting with the West Coast Road near Chalisseri. (18)
38	49	Connecting Madurai and Dhanushkodi. (90)
39	50	Connecting Nasik with the highway specified in serial No. 5 near Poona. (120)

Other Roads

The Government of India also aid the development of certain arterial roads in the States. These include, *inter alia*, the Passi-Badarpur Road in Assam and the West Coast Road in the States of Maharashtra, Mysore and Kerala. Nearly 415 miles of roads were constructed or improved from April 1956 to the end of the December 1961.

Under a special programme approved in May 1954, for the development of certain selected State roads of inter-State or of economic importance, about 925 miles of new roads were constructed and about 1,975 miles of existing roads improved during the Second Plan period. In the Third Plan about 500 miles of new roads are expected to be constructed and 1,000 miles of existing roads improved under this programme.

Roads in the States' Sector

Under the programmes drawn up by the States and Union Territories for the Second Plan period, about 22,000 miles of surfaced roads were constructed. About 25,000 miles of surfaced roads are expected to be added during the Third Plan.

Border Roads Development Board

Established in March 1960, the Board is charged with the task of accelerating the economic development of the border areas by making these areas accessible through the development of arterial routes.

Twenty-Year Plan

A new long-term plan for road development, under consideration, aims at bringing every village (a) in a developed and agricultural area within 4 miles of a metalled road and 1.5 miles of any road, (b) in a semi-developed area within 8 miles of metalled road and 3 miles of any road, and (c) in an undeveloped and uncultivable area within 12 miles of a metalled road and 5 miles of any road. These targets, when achieved, will provide an average of 52 miles of road per 100 sq. miles of area as against about 36 miles at present.

ROAD TRANSPORT

Motor Vehicles

The number of motor vehicles on road in India at the end of March 1962 was 7,10,822 compared to 2,11,949 at the end of March 1947. There

were 1,67,584 motor cycles and autorickshaws, 3,04,618 private cars and jeeps, 59,089 public service vehicles, 24,191 motor cars, 1,77,418 goods vehicles and 37,922 miscellaneous vehicles. About 10 lakh vehicles are expected to be on road by the end of March 1966.

Administration

Passenger transport has been nationalised in varying degrees in the States. In many of them statutory corporations have been set up for providing this service. There were about 18,000 vehicles being operated by the undertakings in the public sector at the end of the Second Plan. Goods transport continues to be in the private sector. In the Assam and North Bengal area, however, a road transport organisation has been set up under governmental auspices for essential services.

An Inter-State Transport Commission has been set up for the development, co-ordination and regulation of road transport services on inter-State routes. The Commission has brought about reciprocal agreements between all the States except Kerala and Madras.

To ensure proper co-ordination between the different modes of transport on the one hand, and Central and State policies on the other, the Government of India have set up the Transport Development Council, the Road and Inland Water Transport Advisory Committee and the Central Transport Co-ordination Committee.

An Association of State Road Transport Undertakings was set up in 1963 to co-ordinate the activities of the undertakings and to secure procedural uniformity, high standards of service and economic operation.

INLAND WATERWAYS

The length of navigable waterways is over 5,000 miles. The important ones are the Ganga and the Brahmaputra and their tributaries, the Godavari and the Krishna and their canals, the backwaters and canals of Kerala, the Buckingham canal in the Madras and Andhra States, the West Coast canals and the Mahanadi canals in Orissa.

To co-ordinate the development of water transport on the Ganga, the Brahmaputra and their tributaries, the Ganga-Brahmaputra Water Transport Board was set up in 1952 by voluntary co-operation of the Central and State Governments.

At present, 1,557 miles of rivers are navigable by mechanically-propelled vessels and 3,587 miles by large country boats. Navigation can be developed on shallow stretches to some extent by deepening the channels, by regulation works, dredging, and by the use of craft specially designed to negotiate such stretches. Deepening by dredging entails heavy outlay. Attention has, therefore, been focussed on the use of specially designed shallow craft.

Central schemes costing approximately Rs. 7.57 crores have been included in the Third Plan for the development of inland water transport in the country. A further provision of Rs. 1.48 crores has been made in the Third Plan of the State Governments.

The Central plan provides for the purchase of survey launches, dredgers and tugs. Port facilities at Pandu and Gauhati will be developed. Work on the river port at Pandu is already in progress. The plan also includes development of inland water transport on the Brahmaputra, Ganga, Rupnarain, Mahanadi, Nerbada and Tapti rivers and the Hiji canal, Rajasthan canal, Orissa canals, Buckingham canal, Badagara-Mahe canal, Cochin-Quilon canal and Damodar Valley canal. Water transport facilities on Thana Creek and Govind Sagar Lake (Himachal Pradesh) and Kerborne (Maharashtra) are also to be developed during the Third Plan period.

SHIPPING

Progress during the Plans

At the end of December 1963, ships totalling 12.1 lakh GRT were on the Indian Register—vessels of 3.9 lakh GRT on the coastal trade and 8.2 lakh GRT on the overseas trade.

The tonnage at the end of the Second Plan was 9.5 lakh GRT including ships under construction. The Third Plan target of acquiring an additional tonnage of 5.5 lakh GRT was exceeded at the end of 1963 taking into account orders placed for new ships and negotiations for acquisition of second-hand ships.

National Shipping Board

The National Shipping Board which advises the Government on the policy relating to shipping was reconstituted in 1963.

Shipping Corporation of India

The Shipping Corporation of India, brought into existence in October 1961, by merging the Eastern and Western Shipping Corporations, has a fleet of 25 dry cargo vessels, 2 passenger-cum-cargo vessels and 2 coastal tankers aggregating about 2,20,270 GRT. The cargo vessels operate on India-Australia, India-Far East-Japan, India-Black Sea, West Coast of India-West Pakistan-Japan, India-Pakistan-UK-Continent, India-Poland and India-USA routes. The passenger-cum-cargo vessels run on Bombay-East Africa and Madras-Singapore routes. The tankers are on time charter to oil companies for carrying refined products along the coast.

The Mogul Line Ltd., which is a subsidiary company of the Shipping Corporation of India, has a fleet of 4 passenger-cum-cargo ships of about 26,000 GRT engaged in the Haj pilgrim traffic.

Other Shipping Companies

There are more than 30 other Indian shipping companies. Of these 8 are operating both in the overseas and coastal trades, namely the Scindia Steam Navigation Co. (2.9 lakh GRT), Jayanti Shipping Co. (2.1 lakh GRT), India Steamship Co. (1.3 lakh GRT), Great Eastern Shipping Co. (1.28 lakh GRT), Surrendra Overseas (0.57 lakh GRT), Bharat Line (0.41 lakh GRT), Ratnakar Shipping Co. (0.28 lakh GRT) and Malabar Group of Companies (0.26 lakh GRT).

The Shipping Co-ordination Committee, set up in 1958, ensures effective use of available Indian shipping and co-ordinates the shipping arrangements for government-owned or controlled cargoes.

INOSA

The Indian National Steamship Owners' Association came into existence in 1930, with the main object of organising united action to promote and protect the interests of national shipping, ship-building and allied industries. The Association, recognised by the Government as a representative body of Indian shipowners has been given due representation on most of the Government bodies concerned with shipping.

Hindustan Shipyard

The Visakhapatnam Shipyard was purchased from the Scindias by the Government in March 1952, and its management entrusted to the Hindustan Shipyard Ltd., in which all the shares are held by the Government. The first vessel built at the yard was launched in March 1948. The Shipyard's production capacity is at present about 3 ships of modern design per year. The Shipyard has so far delivered 36 ocean-going ships including a passenger-cum-cargo vessel and a naval craft of an aggregate gross tonnage of 1,68,191. Seven ships are under various stages of production.

Second Shipyard

A second shipyard is being established at Cochin with an initial capacity to build ships totalling about 60,000 GRT per year. The capacity is to be increased later on to 80,000 GRT per year.

The project has been included in the Third Plan among the projects for which foreign credits are yet to be arranged and a provision of Rs. 15 crores has been made. Land has been acquired and arrangements are being made for obtaining technical and financial collaboration.

Training Institutions

Seventy-seven cadets passed out of T. S. *Dufferin* during the year ending June 1963, who have all been employed on board ships.

Six thousand four hundred and thirty-three candidates took advantage of the training facilities available at the Nautical and Engineering College, Bombay, till the end of November 1963. Ninety-three cadets, representing the tenth batch of trainees, passed out of the Marine Engineering College, Calcutta, during 1963.

The three ratings training establishments—T.S. *Bhadra*, T.S. *Mekhala* and T.S. *Nau Lakshi*—together trained 15,220 boys, 8,198 for the deck department and 7,022 for the engine room department, till the end of September 1963.

PORTS

India has seven major ports, namely, Calcutta, Bombay, Madras, Mormugao, Cochin, Visakhapatnam and Kandla. During 1962-63, these ports handled 427 lakh tonnes of cargo as against 339 lakh tons in 1961-62.

The ports of Bombay, Calcutta and Madras are administered by statutory port trust boards subject to the overall control of the Central Government. Under the Major Port Trusts Act, 1963, applicable to all major ports except Bombay, Calcutta and Madras, statutory port trusts for the administration of the ports of Cochin, Kandla and Visakhapatnam started functioning from April 1, 1964. The administration of the major port of Mormugao is also likely to be handed over to a statutory port trust in course of time.

The traffic handled by, and the financial results of the working of the major ports, during 1962-63 are as follows :

TABLE 180

TRAFFIC AND EARNINGS OF MAJOR PORTS

Port	Ships entered		Imports (lakh tons)	Exports (lakh tons)	Surplus (+) or deficit(—) in earnings (Rs. lakhs)
	No.	Gross tonnage (lakhs)			
Calcutta	1,821	205.2	54.8	47.2	+52.27
Bombay	3,346	217.7	110.8	48.6	+169.78
Madras	1,214	84.4	25.9	12.0	+35.31
Mormugao	620	46.2	1.1	53.5	+6.14
Cochin	1,330	78.1	19.6	4.0	—4.30
Kandla	311	25.2	14.1	3.3	+23.99
Visakhapatnam	605	45.0	17.2	15.0	—7.96
TOTAL	9,247	701.8	243.5	183.6	+275.23

A provision of Rs. 75 crores has been made in the Third Plan for the development of six major ports. The two important schemes included

in it are the setting up of a satellite port at Haldia in the Hooghly estuary and modernisation of Bombay docks. Mangalore and Tuticorin are also to be developed as major ports during the Third Plan.

Work on the expansion of Cochin and Madras ports is nearing completion. The construction of four additional berths at Visakhapatnam, two of which will be equipped with a mechanical ore handling plant enabling the port to export over 80 lakh tons of iron ore annually is in progress. Schemes for the development of Mormugao port are under consideration.

Minor Ports

The Indian coastline is also served by a large number of minor ports (about 225, of which 150 are working ports), which together handle a coastal and overseas traffic of about 78 lakh tons per annum. The administration of these ports is the responsibility of the State Governments. Various works of improvement were undertaken under the First and Second Five Year Plans. The development programme for minor ports included in the Third Plan is estimated to cost Rs. 11.54 crores in the Central sector and Rs. 4.44 crores in the States' sector. The Central programme includes, among others, the setting up of a dredger-cum-survey launch pool with an initial strength of two dredgers and six survey launches. It is expected that at the end of the Third Plan, the minor ports will be able to handle a traffic of about 90 lakh tons.

National Harbour Board

For advising the Central and State Governments on the co-ordinated development of ports with special attention to minor ports, the National Harbour Board was constituted in 1950, consisting of representatives of Parliament, the Government of India, the maritime States, major port authorities, and non-official members representing trade, industry and labour. A committee of the Board meets every year to screen and accord priorities to schemes for hydrographic surveys.

CIVIL AVIATION

Indian aircraft flew about 535 lakh km carrying about 12.3 lakh passengers and nearly 767.7 lakh kg of cargo and mail on scheduled and non-scheduled services taken together during 1963.

Progress Since 1947

Tables 181 and 182 show the progress made by civil aviation in India since 1947, on scheduled and non-scheduled services.

TABLE 181
CIVIL AVIATION (SCHEDULED SERVICES)

Year	Kms. flown (thousands)	Passengers (thousands)	Freight (thousand kg)	Mail (thousand kg)
1947	1,50,66	2,55	25,61	6,37
1951	3,13,77	4,49	3,97,57	32,57
1956	3,77,88	5,59	4,36,42	57,53
1961	4,43,80	9,73	4,00,70	75,34
1962	4,52,04	10,33	3,77,04	81,58
1963	4,70,70	11,58	3,72,55	88,31
(Estimated)				

TABLE 182
CIVIL AVIATION (NON-SCHEDULED SERVICES)

Year	Km. flown (thousand)	Passengers carried (thousand)	Freight carried (thousand kg.)
1947	65.19	62	13.57
1951	1,06.45	66	5,96.94
1956	92.26	114	4,40.31
1961	95.57	110	3,91.27
1962	87.40	98	3,49.93
1963*	64.38	76	3,04.84

Air Corporations

The Indian Airlines Corporation whose operating fleet consists of 12 Viscounts, 3 Skymasters, 10 Fokker Friendship, 38 Dakotas and three Caravelle Jets, links up most of the principal centres in the country and also provides services to the neighbouring countries, viz. Pakistan, Burma, Ceylon, Afghanistan and Nepal. The Corporation carried 9,06,546 revenue passengers on its services and its aircraft flew a total of 3,58,13,926 revenue kilometres during 1962-63.

The Air-India Corporation, with its fleet of 6 Boeing 707 Jets provides services reaching out to 21 countries. During 1962-63, it carried 1,65,736 revenue passengers on its services and its aircraft flew over 1,38,94,000 revenue kilometres.

Flying Clubs

There are 16 subsidised flying clubs with headquarters at Delhi, Bombay, Madras, Patna, Calcutta, Lucknow (with satellite centres at Kanpur, Allahabad and Varanasi), Jullundur, Hyderabad, Nagpur, Jaipur, Indore (with a satellite centre at Bhopal), Bangalore, Trivandrum, Coimbatore, Baroda and Patiala. There are three Government gliding centres at Poona, Bangalore and Lucknow and four subsidised gliding clubs at New Delhi Pilani, Deolali and Ahmedabad. During 1963, eight Private Pilots' Licences and one Commercial Pilot's Licence were issued to candidates trained by the flying clubs.

Aerodromes

Eighty-two aerodromes are controlled and operated by the Civil Aviation Department. These are :

I. *International Aerodromes* : Bombay (Santa Cruz); Calcutta (Dum Dum); Delhi (Palam).

II. *Major Aerodromes* : Agartala, Ahmedabad; Begumpet; Delhi (Safdarjung); Gauhati; Madras (St. Thomas Mount); Nagpur; Tiruchirappalli.

III. *Intermediate Aerodromes* : Amritsar; Aurangabad; Baghdogra; Balurghat; Baroda; Belgaum; Bhavnagar; Bhunter (Kulu); Bhopal; Bhuvaneshwar (Cuttack); Bhuj; Bombay (Juhu); Coimbatore; Cooch-Behar; Gaya; Indore; Jaipur; Junagadh (Keshod); Kailshahar; Kamalpur; Kandla; Khowai; Kumbhigram; Lucknow (Amausi); Madurai; Mangalore (Bajpe); Mohanbari; North Lakhmipur (Lilabari); Passighat; Patna; Phoolbagh; Porbandar; Port Blair; Rajkot; Ranchi; Rupsi; Trivandrum; Tulihal; Udaipur; Varanasi; Visakhapatnam.

IV. *Minor Aerodromes* : Akola; Bahala; Bilaspur; Chakulia; Cuddapah; Donakonda; Jhansi; Jharsuguda; Jabalpur; Kanpur (Civil); Khandwa; Kolhapur; Kotah; Lalitpur; Malda; Muzaffarpur (Rewaghat); Mysore;

*Estimated.

Palanpur (Dessa); Panagarh; Panna; Raipur; Rajahmundry; Ramnad; Satna; Shella; Sholapur; Tanjore; Vellore; Warangal; Vijawada.

The aerodromes at Ahmedabad, Patna, Bombay (Santa Cruz), Calcutta (Dum Dum), Delhi (Palam), Delhi (Safdarjang), Madras (St. Thomas Mt.), Tiruchirappalli, Varanasi, Jodhpur*, Bhuj, Fort Blair and Amritsar have been declared customs aerodromes.

Two new aerodromes at Raxaul and Jogtani (both in Bihar) are under construction.

Aircraft

On December 31, 1963, 540 aircraft held current certificates of registration and 216 current certificates of airworthiness.

Air Transport Agreements

Air transport agreements have been concluded with Afghanistan, Australia, Ceylon, Czechoslovakia, Egypt, France, Italy, Japan, Netherlands, Pakistan, Philippines, Sweden, Switzerland, Thailand, Iraq, the United States of America, the United Kingdom and the Union of Soviet Socialist Republics. Similar agreements concluded with Lebanon, Iran and the Federal Republic of Germany are awaiting ratification.

INDIA METEOROLOGICAL DEPARTMENT

The India Meteorological Department, with its headquarters at New Delhi and regional offices at Bombay, Calcutta, Delhi, Madras and Nagpur provides weather service to a wide variety of interests such as aviation, navigation, railways, communications, irrigation and power projects, agriculture, etc. Its scientific activities cover observation and research in climatology including weather forecasting, agricultural and hydrological meteorology, atmospheric electricity, terrestrial magnetism, seismology and astrophysics including solar and stellar physics and radio astronomy, through its divisions and observatories at Poona, Shillong, Colaba, Alibag and Kodaikanal.

The Department's Northern Hemispherical Analysis Centre, also located at New Delhi, has attached to it one of the five Northern Hemisphere Exchange Centres spread over different countries and a sub-continental broadcast centre for exchange and dissemination of meteorological data for international use.

The Institute of Tropical Meteorology, a unit of the Department, is engaged in research in meteorology and allied fields. An International Meteorological Centre has been established at the Institute in connection with the International Indian Ocean Expedition. The Institute and the Centre have received financial assistance from the UN Special Fund.

A special unit has also been constituted at Trivandrum for collaboration with the Department of Atomic Energy in India's programme of launching rockets, for peaceful purposes, from the International Rocket Base at Thumba.

TOURIST TRAFFIC

Administrative Set-up

A Tourist Traffic Branch was set up under the Ministry of Transport in 1949 and a chain of regional tourist offices has since been established in important cities like Delhi, Calcutta, Bombay and Madras. Tourist information offices have also been set up at Agra, Aurangabad, Cochin, Jaipur and Varanasi. These offices work in close collaboration with the State Governments, travel agents, hoteliers and carriers. Abroad, India has tourist offices in New York, San Francisco, London, Melbourne, Paris, Toronto and Frankfurt.

*Jodhpur is an Air Force aerodrome.

A separate Department of Tourism in the Ministry of Transport has been set up. A Tourist Development Council, including representatives of the public, the travel trade and the State Governments, advises the Government on tourist problems. Four Regional Tourist Advisory Committees, which were discontinued in 1962 consequent on the setting up of Tourist Advisory Bodies by State Governments, have been reconstituted to look into the regional problems concerning promotion of tourism in the Eastern, Northern, Southern and Western zones.

Hotel Industry

The major recommendations of the Hotel Standards and Rates Structure Committee, constituted in 1957 to advise the Government on the question of laying down the criteria for standardisation and gradation of hotels in India and the question of presenting a suitable rate structure, are being implemented. The Hotel Classification Committee set up by the Government in 1962 has classified 186 hotels, considered capable of catering to foreign tourists, in five categories according to "Stars" allotted to them. Fifty-nine restaurants have also been considered fit for recognition.

Financial assistance and tax benefits have been extended to the hotel industry. An Institute of Catering and Hotel Management in New Delhi offers full-time and short-term courses in specialised branches of hotel management.

Relaxation in Tourist Regulations

Regulations relating to police, registration, currency, exchange control, and customs have been relaxed to promote tourist traffic. As a result of the recommendations of the *Ad Hoc* Committee on Tourism, which submitted its report in August 1963, liquor and landing permits have also been liberalised. A special inter-departmental committee makes periodic inspection of the various ports of entry with a view to ascertaining the possibility of further simplification of such formalities. Concessional tickets are offered by the railways for round trip journeys and circular tours. Special concessions are given to students and pilgrims as well as to tourists visiting hill resorts during summer. At present, there are 50 officially recognised travel agencies and shikar (big game) agencies to serve tourists. The services of an increasing number of educated, specially trained and approved travel guides are also available. A staff training school imparts training to fresh recruits as well as personnel engaged in tourist promotion activities.

Information

Tourist information material in the form of guide books, pamphlets, folders, maps, posters and picture cards is being brought out. These are produced in English, French, Spanish, German, Italian and in the Indian languages and are being distributed through tourist offices in India and abroad. A few publications have also been issued in Japanese and Thai for distribution to tourists coming from Japan and Thailand. An illustrated monthly magazine entitled *Traveller in India* is issued to attract tourists. Travel films are also made for distribution and exhibition abroad.

Number of Tourists

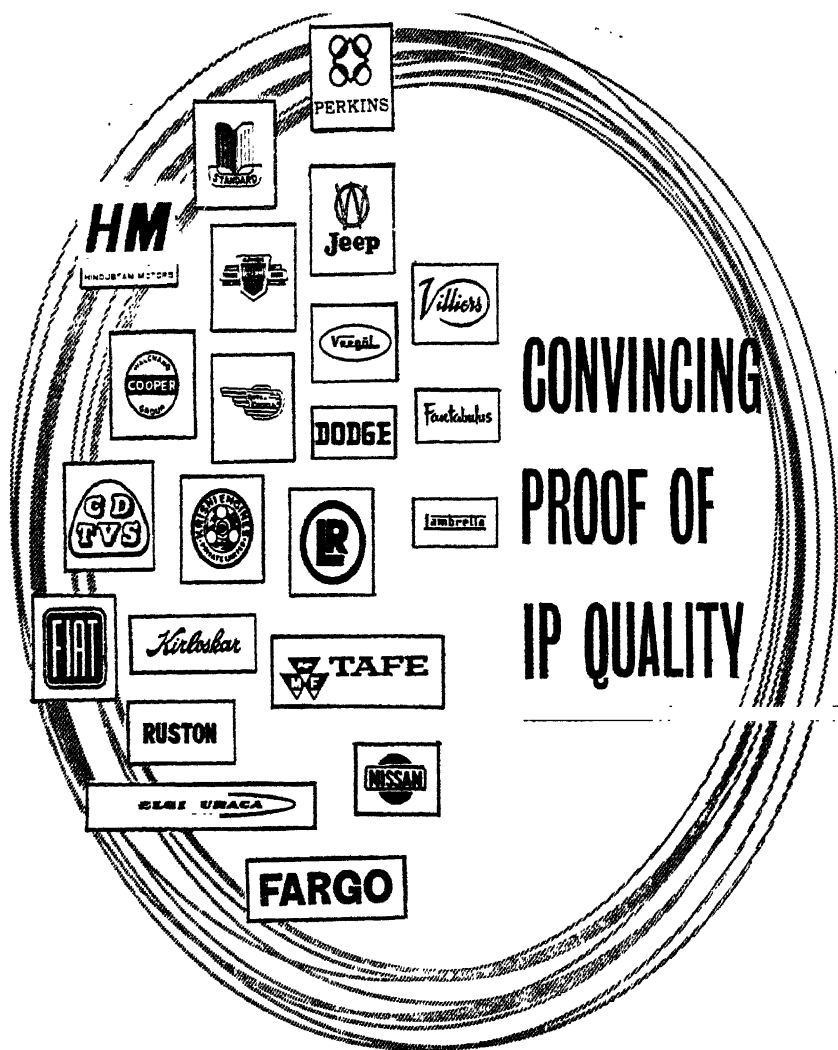
Approximately 1.41 lakh tourists visited India during 1963 which was more than double the number in 1956.

Development Plans

The Central and some of the State Governments have formulated plans to provide for the development of tourism. The programme envisages additional accommodation, transport and recreational facilities at important tourist centres, especially those situated in out-of-the-way places. Broadly, these are of three kinds : (i) schemes for the development of facilities at

a limited number of places visited largely by foreign tourists, (ii) facilities at places mainly for home tourists, and (iii) schemes for places of regional and local importance, which are visited by home tourists of low and middle income groups. Schemes in the first category are being taken up by the Central Government. Schemes in the second group are being implemented by the States with assistance from the Centre and those in the third group exclusively by the States.

The allocation in the Third Plan for expenditure by the Central Government on tourist traffic development schemes is Rs. 3.5 crores, while the State Governments are expected to spend Rs. 4.5 crores.



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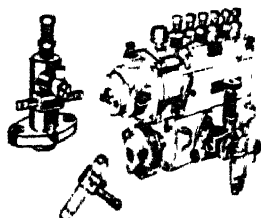
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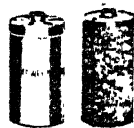
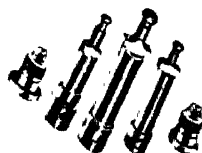


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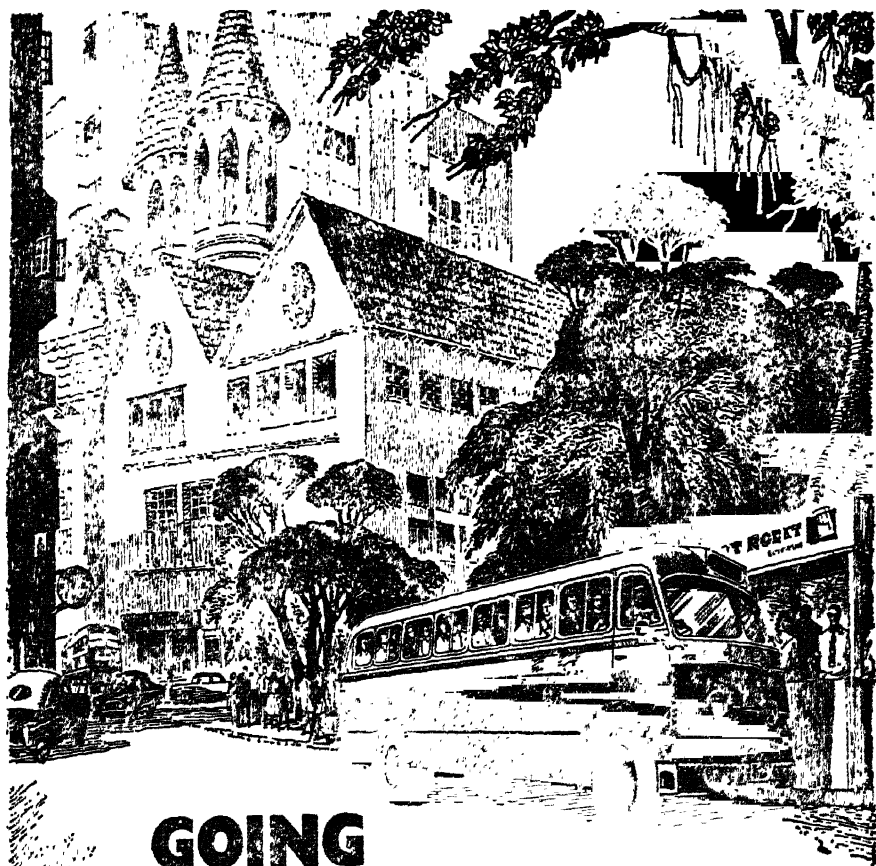
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CHAPTER XXIII

COMMUNICATIONS

The Posts and Telegraphs services constitute the second largest State undertaking in India, next only to the railways. The number of persons employed on March 31, 1963 was 4,27,029 while the capital outlay was Rs. 181.31 crores.

The Department of Posts and Telegraphs functions through 15 territorial units—14 posts and telegraphs circles and 1 postal circle for Delhi only. There are five telephone districts for the cities of Calcutta, Bombay, Madras, New Delhi and Hyderabad, three tele-communication units each for Madras, Bombay and Calcutta regions, a tele-communication circle for Jammu and Kashmir and a number of other administrative units on a functional basis. The Department works as a commercial-cum-utility service and makes over a part of its surplus earnings as a contribution to the general revenues; the rest accrues to the credit of the Department. The administration of the Department vests in the Posts and Telegraphs Board constituted on December 14, 1959.

POSTAL SERVICES

The postal traffic and postal revenue since 1951 are shown below.

TABLE 183
POSTAL TRAFFIC AND REVENUE

Year	Number of postal articles		Postal revenue	
	Total (in crores)	Average per head of population	Total (in crores of rupees)	Average per head of population
1951	227.0	6.37	21.04	0.59
1955-56	229.7	8.40	29.43	0.82
1960-61	402.9	9.21	40.78	0.93
1961-62	431.2	9.71	45.62	1.04
1962-63	481.9	10.97	50.90	1.16

Some statistics regarding the postal services are given below.

TABLE 184
POSTAL STATISTICS

	1950-51	1955-56	1961-62	1962-63
Number of post offices	36,094	55,042	82,223	87,484
Miles Kilometres of surface mail routes*	1,69,105	2,42,282	5,47,931	5,63,444
Miles Kilometres of airmail routes*	18,994	18,959	47,159	47,394
Number of postal articles handled (crores)	227.01	299.7	431.2	481.9
Number of insured articles (lakhs)	37.23	40.00	44.0	47
Number of money orders (crores)	5.14	6.50	8.1	8.6
Postal revenue (crores of rupees)	21.04	29.43	45.6	50.9

Table 185 shows the number of post offices and letter boxes in the urban and rural areas in India.

*Figures are in miles for 1950-51 and 1955-56 and in kilometres for 1961-62 and 1962-63

TABLE 185
URBAN AND RURAL POST OFFICES AND LETTER BOXES

	On March 31, 1951		On March 31, 1956		On March 31, 1963	
	Urban	Rural	Urban	Rural	Urban	Rural
<i>Post Offices</i>						
Permanent ..	4,665	21,441	5,567	32,575	6,682	49,113
Temporary ..	619	9,369	977	15,923	1,518	30,171
<i>Letter Boxes</i> ..	23,253	61,726	32,701	78,528	41,665	1,24,160

The number of new post offices opened between April 1, 1963 and October 31, 1963 was 1,396.

Urban Mobile Post Offices

The urban mobile post offices scheme is in operation at Nagpur, Madras, Delhi, Bombay and Calcutta. The mobile post office visits important centres of the city at specified hours after the ordinary post offices have closed for the day. It works on all days of the year, including Sundays and postal holidays. The mobile post offices at Nagpur, Bombay and Madras also book money orders in the morning shifts.

Air Mail and All-up Schemes

An inland night air mail service links up the principal cities of India, namely, Bombay, Calcutta, Madras, Delhi and Nagpur. Under the "All-up Scheme" all inland letters, letter cards, post cards and money orders are normally carried by air without any air surcharge.

Air Parcel Service with Foreign Countries

India has an airmail service for most of the countries and an air parcel service to Aden, Afghanistan, Argentine Republic, Australia, Austria, Bahamas, Bahrain, Barbados, Bechuanaland Protectorate, Belgium, Bermuda, Brazil, British East Africa, British Honduras, British Guiana, Brunei, Burma, Canada, Ceylon, China (People's Republic), Chile, Colombia, Costa Rica, Cuba, Cyprus, Czechoslovakia, Denmark, Dominica, Dominican Republic, Dubai, Ethiopia, El Salvador, Fiji, Finland, France, Germany (Federal Republic), Germany (Democratic Republic), Ghana, Gibraltar, Greece, Grenade, Guatemala, Hong Kong, Haiti, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Kuwait, Lebanon, Malaysia, Mauritius, Mexico, Netherlands, New Zealand, Nicaragua, Nigeria, North Borneo, Norway, Northern Rhodesia, Nyasaland, Pakistan, Panama Republic, Paraguay, Peru, Poland, Portuguese East Africa, Sarawak, Saudi Arabia, Sierra Leone, St. Lucia, South West Africa, Southern Rhodesia, South Korea, Sudan, Surinam, Sweden, Switzerland, Syria, Thailand, Tartola, Tobago, Trinidad, Turkey, Union of South Africa, UAR, UK, USA, USSR, Uruguay, Venezuela, Yugoslavia and Zanzibar.

Insured air parcel service is available for Aden, Australia, Austria, Belgium, British East Africa, Burma, Canada, Ceylon, Czechoslovakia, Denmark, Dubai, Egypt, France, Germany (Federal Republic), Germany (Democratic Republic), Ghana, Greece, Hong Kong, Irish Republic, Japan, Kuwait, Malaya, Netherlands, Pakistan, Persian Gulf, Sweden, Switzerland, Thailand, Turkey, UK, USA, USSR and Zanzibar.

Facilities are also available for booking insured airmail letters for Aden, Austria, Belgium, British East Africa, Burma, Ceylon, Czechoslovakia, Denmark, France, Germany (Federal Republic), Germany (Democratic Republic), Hong Kong, Japan, Malaysia, Netherlands, Norway, Pakistan, Sweden, Switzerland, Syria, Thailand, UAR, UK and Zanzibar.

Postal Savings Bank

Facilities are available at most post offices in the country for depositing savings, the maximum limit of the deposit for an individual depositor being Rs. 15,000 and for a joint account Rs. 30,000. The interest rates on these savings accounts are 3 per cent per annum on any sum not exceeding Rs. 10,000 in the case of an individual and Rs. 20,000 in the case of a joint account and 2½ per cent per annum on the remainder of the balance.

Bi-weekly withdrawal facilities, subject to a maximum of Rs. 1,000, are now available in respect of individual accounts at all post offices doing savings bank work. Since 1958, a new system has been introduced in all postal head offices and sub-offices by which savings account holders can withdraw and deposit money by cheque. A system of nomination for savings bank has been introduced since August 1, 1960. To ensure expeditious action at the savings bank counter, Teller System has been introduced in New Delhi head office. Under this system deposits and withdrawals can be made without presentation of the pass book and withdrawals up to Rs. 250 are permissible by the counter clerk himself.

Postal Life Insurance

Postal life insurance business between 1950-51 and 1962-63 was as follows.

TABLE 186
POSTAL LIFE INSURANCE

	New business effected		Total business in force	
	No. of policies	Sum assured (in crores of rupees)	No. of policies	Sum assured (in crores of rupees)
<i>(a) Civil Wing</i>				
1950-51	6,546	1.43	84,630	17.64
1955-56	17,074	3.29	1,26,305	26.89
1961-62	7,669	1.51	1,49,449	30.32
1962-63	7,590	1.96	1,52,515	31.45
<i>(b) Military Wing</i>				
1950-51	875	0.52	1,573	0.89
1955-56	1,026	0.81	7,326	4.71
1961-62	338	0.17	9,363	6.04
1962-63	329	0.20	9,516	6.12

TABLE 187
POSTAL LIFE INSURANCE—EXPENSE RATIO*

Year	Civil wing			Military wing		
	Total premium income (in thousand rupees)	Total expenses (in thousand rupees)	Expense ratio (%)	Total premium income (in thousand rupees)	Total expenses (in thousand rupees)	Expense ratio (%)
1950-51	73.34	9.52	13.46	6.38	80	13.03
1955-56	1,11.61	12.69	11.37	21.70	50	2.30
1961-62	1,27.99	12.74	9.96	28.32	45	1.61
1962-63	1,34.61	11.48	8.53	28.39	62	2.18

TELEGRAPH SERVICES

Some salient statistics regarding the telegraph services are given in Table 188.

*The percentage of expenses to the premium income of the Post Office Insurance Fund (civil and military wings combined) for 1962-63 is 7.42.

TABLE 188
TELEGRAPH STATISTICS

	1950-51	1955-56	1961-62	1962-63
Number of telegraph offices (including licensed offices)	8,205	9,893	11,896	11,957
Number of telegrams excluding P & T service telegrams (in lakhs)	2.79	3.35	4.07	4.07
Mileage Kilometrage of over-head wires*	7,21,243	8,67,199	17,95,656	18,56,669
Mileage Kilometrage of underground cable conductors*	7,13,880	10,03,437	27,51,947	32,71,315
Carrier VFT channels (in miles/km.)	3,94,912	4,79,210	12,47,573	15,38,034
Telegraph revenue (in crores of rupees)	5.94	6.7	11.1	11.6

Out of 4.07 lakh telegrams (excluding the P. & T. service telegrams) transmitted during 1962-63, 367.1 lakhs were inland and 39.4 lakhs foreign telegrams. The revenue derived from these telegrams amounted to Rs. 8.48 crores (Rs. 7.15 crores from inland and Rs. 1.33 crores from foreign telegrams).

Telegraph Service in Hindi and other Indian Languages

Introduced on June 1, 1949, first at Agra, Allahabad, Gaya, Jabalpur, Kanpur, Lucknow, Nagpur, Patna and Varanasi, the Hindi telegraph service is now available at about 2,162 offices in the country. The service is available in all the P. & T. circles. About 4,300 operators have hitherto been trained in Devanagari telegraphy.

Telegrams can be sent in any Indian language provided they are written in Devanagari script. In addition, the following special facilities are available in the Hindi telegraph system :

- (i) Greetings telegrams on festive occasions;
- (ii) Emergent telegrams to call relatives and friends in case of serious illness or death;
- (iii) Tendering of telegrams in Hindi on phonogram system where such a facility exists;
- (iv) Telegraphic money orders; and
- (v) Registration of telegraphic abbreviated addresses at concessional rates.

Telegraph traffic in Hindi has progressively been increasing. As against only 5,784 telegrams in 1950-51, 58,522 in 1955-56 and 1,76,747 in 1961-62 the number of telegrams in Hindi despatched in 1962-63 was 2,25,417.

TELEPHONE SERVICES

Table 189 shows the number of telephones, telephone exchanges, trunk calls and the amount of telephone revenue.

TABLE 189
TELEPHONE STATISTICS

	1950-51	1955-56	1961-62	1962-63
Number of telephones	1,68,000	2,78,000	5,21,000	5,81,000
Number of telephone exchanges (including P.B. Xs. and P.Xs.)	3,700	5,817	8,805	9,637
Number of trunk calls (in lakhs)	71	1.86	3.63	4.12
Telephone revenue (in crores of rupees)	9.07	14.4	31.1	35.1

Own Your Telephone Scheme

The scheme is now in operation at Ahmedabad, Amritsar, Bombay, Bangalore, Calcutta, Delhi, Hyderabad, Kanpur, Madras and Nagpur.

*Figures for 1950-51 and 1955-56 are in miles and for 1961-62 and 1962-63 in kilometres.

Measured Rate System

This system is in operation in 91 telephone exchanges. Under this system a subscriber pays for every additional local call over a prescribed number of free calls every quarter plus a fixed quarterly rental.

Ship to Shore Service

Under this service the subscribers can have telephonic contact with ships at sea, within 500 miles of the respective exchange. This service has so far been introduced at Bombay, Calcutta and Madras.

Telephone Industry

In 1963-64 the Indian Telephone Industries (Private) Limited, Bangalore, manufactured 1,46,132 telephones, 1,51,460 auto-exchange lines including spares and ancillary items worth Rs. 7.20 crores, and transmission equipment and measuring instruments worth Rs. 1.80 crores. The Company has undertaken the production of several new types of equipment for the railways and defence. The newly developed telephone instrument named 'Priyadarshini' whose performance is far superior to the instrument now in use has gone into mass production.

Teleprinters

The newly established Hindustan Teleprinters Ltd., manufactured 980 machines in 1963-64.

Wireless Planning and Co-ordination

This wing of the Department of Communications, assigns radio frequencies and operating licences to official and non-official users of wireless. Cases of radio interference are investigated and solved through national and international co-ordination. A network of monitoring stations has been set up for the frequency management. Of the nine stations planned to be set up during the Third Plan, seven are functioning in Delhi, Nagpur, Bombay, Calcutta, Shillong, Srinagar, and Gorakhpur.

OVERSEAS COMMUNICATIONS

The Overseas Communications Service, which was nationalised on January 1, 1947, is responsible for the operation and development of telecommunication link of India with foreign countries except Ceylon, Pakistan and Nepal.

During 1962-63, the Service handled about 28 lakh messages of about 8.8 crore paid words, 48,000 radio-telephone calls, about 800 radio photo-telegrams, about 10,000 international telex calls and about 17 lakh words for multi-destination press broadcasts.

Radio Telephone Service

India has direct radio telephone service with the following countries : Aden, Afghanistan, Australia, Bahrain, Burma, China, Ethiopia, France, Germany (Federal Republic), Hong Kong, Indonesia, Iran, Iraq, Italy, Japan, Kenya, Malaysia, Poland, Soudi Arabia, Switzerland, UAR, UK, USSR and Viet Nam (South).

Radio telephone service via direct connection with international networks is available between India and the following countries : Abadan, Algeria, Argentina, Asmara, Austria, Australia, Balearic Islands, Barbados, Belgium, Bermuda, Brazil, British Guiana, Bulgaria, Burundi, Canada, Canary Islands, Central African Republic, Ceuta, Chad Republic, Chile, Congo, Costa, Rica, Cuba, Cyprus, Czechoslovakia, Denmark, Doha, Dubai, Farce Island, Fiji, Finland, French Sahara, Forbisher Bay (Canada),

Ghana, Gibraltar, Goosbay Labrador (Canada), Greece, Guatemala, Hawaii, Honduras, Iceland, Irish Republic (Eire), Israel, Jamaica, Jordan, Kuwait, Lebanon, Leeward Islands, Luxembourg, Mongolian Republic, Mexico, Morocco, Muscat, Netherlands, New Foundland, New Zealand, Nicaragua, Nigeria, Norway, Panama, Philippines, Rhodesia, Rumania, Ryukyu Island, Sierre Leone, Spain, Spanish North Africa, South Africa, South West Africa, Sudan, Sweden, Tangier, Trinidad, Tunisia, USA, Vatican City, Windward Islands and Yugoslavia. Telephone service is also available with such ocean lines as are equipped for the purpose.

Radio Telegraph Service

Direct radio telegraph service operates between India and Afghanistan, Australia, Burma, China, France, Germany (Federal Republic), Indonesia, Iran, Iraq, Italy, Japan, Malaysia, Philippines, Poland, Rumania, Viet Nam (North) and (South), Switzerland, Thailand, UAR, UK, USA, USSR and Yugoslavia. Telegraph service with other countries of the world is available through direct links with international networks.

Radio Photo Service

Direct radio photo service operates between India and China, France, Germany (Federal Republic), Italy, Japan, Poland, UK and USSR. In addition, the service is available *via* London to Australia, Belgium, Canada, Czechoslovakia, Cyprus, Denmark, Finland, Germany, Ghana, Greece, Jamaica, Malaysia, Nigeria, Norway, Portugal, Rumania, South Africa, Sweden, Switzerland, UAR, USA and Yugoslavia.

International Telex Service

The Telex Service which was inaugurated between Bombay and Ahmedabad and UK on June 16, 1960 has been extended to other countries, namely : Argentina, Australia, Austria, Belgium, Bermuda, Brazil, Bulgaria, Canada, Czechoslovakia, Denmark, Ethiopia, Faroe Island, Fiji, Finland, France, Germany (Democratic Republic), Ghana, Greece, Hong Kong, Hungary, Iceland, Irish Republic, Israel, Italy, Kenya, Lebanon, Luxembourg, Malaysia, Malta, Mexico, Netherlands, New Zealand, Norway, Peru, Poland, Rumania, Spain, Sudan, Sweden, Switzerland, Thailand, USA, USSR and Yugoslavia. This service enables the subscribers to exchange telegrams on teleprinter machines direct with subscribers of other countries. The service was also introduced for the Calcutta group in 1963 and from New Delhi from May 28, 1964.

Other Services

The Overseas Communications Service also handles news transmissions on behalf of the Government of India for the benefit of Indian consular posts abroad and on behalf of certain press agencies to different areas outside India. Twenty-one teleprinter channels have been leased to Government agencies and private business concerns for communication by permanent teleprinter lines directly between the parties. Facilities also exist for spoken despatches by correspondents of broadcasting organisations.

CHAPTER XXIV

LABOUR

In the organised sector of India's economy, the largest number of workers are employed in the factories. In 1962, the average daily employment in factories for which figures are available stood at 41.12 lakhs.*

The following table gives the State-wise break-up of average daily employment figures in factories subject to the Factories Act for 1957 and 1960 to 1962 on the basis of the returns submitted by them.

TABLE 190
EMPLOYMENT IN FACTORIES

State/Union Territory	(in thousands)*			
	Average daily number of workers employed			
	1957	1960	1961	1962†
Andhra Pradesh	197	217	228	234
Assam	72	79	80	82
Bihar	180	189	192	203
Gujarat	—	346	361	378
Kerala	155	168	172	176
Madhya Pradesh	155	159	169	173
Madras	325	325	330	342
Maharashtra	—	784	827	850
Mysore	113	172	178	192
Orissa	25	30	33	46
Punjab	99	127	132	145
Rajasthan	48	57	56	64
Uttar Pradesh	283	314	338	351
West Bengal	688	723	739	796
Andaman & Nicobar Islands	3	2	2	2
Delhi	57	69	72	73
Himachal Pradesh	1	2	2	2
Manipur	—	—	—	1††
Tripura	2	2	2	2

The average daily number of workers employed in coal mines in 1962 was 4,32,909 (22,44,977 underground, 63,882 open workings and 1,24,050 surface). The corresponding figure in respect of all mines covered by the Mines Act was 6,86,843 (2,76,868 underground, 2,24,408 open workings and 1,85,567 surface). The total number of workers employed in the cotton mill industry in 1962 was 9,28,571, the daily average number of workers employed being 7,98,512 (4,17,638 first shift, 2,64,483 second shift and 1,16,391 third shift).

NATIONAL EMPLOYMENT SERVICE

The Employment Service, started in 1945, consists of a network of Employment Exchanges each staffed by personnel trained in a carefully devised procedure. The Employment Exchange renders employment assistance to all employment seekers. It also discharges certain special responsibilities, such as the provision of employment assistance to displaced persons, discharged government employees and those belonging to the Scheduled Castes and Tribes.

The Employment Exchanges (Compulsory Notification of Vacancies) Act, enacted in 1960, makes it compulsory for employers usually employing 25 or more workers to notify their vacancies to the Exchange.

*Figures relate to reorganised States and Union Territories and include estimated employment in working factories not submitting returns.

†Provisional.

††Less than 500 in 1957, 1960 and 1961.

At the end of November 1963, there were 352 Exchanges (excluding 20 Universities Employment Bureaux) in the country. The table below gives figures relating to the activities of the Exchanges.

TABLE 191
NATIONAL EMPLOYMENT SERVICE

	No. of xchanges	No. of Regis- trations	No. of applicants placed in employ- ment	No. of applicants on the Live Register	Monthly average number of em- ployers using the Exchanges	No. of vacancies notified
1956	143	16,69,895	1,89,855	7,58,503	5,346	2,96,618
1961	325	32,30,314	4,04,077	18,32,703	10,397	70,839
1962	342	38,44,902	4,58,085	23,79,530	11,472	7,90,445
1963*	352	38,37,995	4,90,894	26,05,715	13,452	8,33,595

The day-to-day administrative control over the Employment Exchanges was transferred to the State Governments with effect from November 1, 1956. The Central Government now limit their responsibilities to policy-making, co-ordination of procedure and standards and to rendering of assistance whenever needed.

Several schemes, such as (i) the collection of employment market information, (ii) occupational research and analysis, (iii) the publication of career pamphlets and handbooks on training facilities, and (iv) vocational guidance and employment counselling, have been implemented to improve the quality of service rendered by the Exchanges.

The Central Committee on Employment, constituted in 1958, advises the Government of India on problems relating to employment, creation of employment opportunities and the working of the National Employment Service.

Craftsmen's Training

There are 284 training centres functioning under the Craftsmen Training Schemes. The other training schemes are the National Apprenticeship Training Scheme, the Scheme for the Training of Industrial Workers (part-time classes) and the Revised Scheme for the Establishment of Work and Orientation Centres for Educated Unemployed. Six Central Training Institutes for Instructors have been set up so far at Bombay, Calcutta, Hyderabad, Kanpur, Ludhiana and Madras and one Institute for Women Instructors at New Delhi. At present working on an uniform pattern, the Institutes will acquire a total training capacity of 2,060 by the end of the Third Plan.

A Central Apprenticeship Council has been constituted under the Apprentices Act, 1961, to advise the Union Government on matters concerning regulation and control of training of apprentices in trades and allied matters. Similarly, a National Council for Training in Vocational Trades has been set up to advise the Government on all questions of training policy, to co-ordinate vocational training and to lay down uniform standards. It also awards national certificates of proficiency to craftsmen and apprentices.

National Institute for Labour Research

The National Institute for Labour Research has been set up to undertake research on labour matters. Registered under the Societies Registration Act XXI of 1860, its membership consists of (1) a chairman nominated by the Government of India, (2) representatives of (a) Central and State Governments, (b) employees' and employers' organisations, and (c) educational and

*For the period January—November.

research institutions, (3) persons interested in labour research who would like to be associated, and (4) persons co-opted by the members.

WAGES AND EARNINGS

Annual Earnings

Table 192 gives the average annual earnings of factory workers for 1956, 1961 and 1962.

TABLE 192
AVERAGE PER CAPITA ANNUAL EARNINGS OF FACTORY WORKERS
DRAWING LESS THAN RS. 200 PER MONTH

(Excludes railway workshops, food, beverages, tobacco and presses groups)

State/Union Territory	1956	1961	1962* (in rupees)
Andhra Pradesh	595	1,080	1,077**
Assam	1,526	1,234	1,054
Bihar	1,236	1,484	1,385
Gujarat	—	1,617	1,666
Kerala	736	1,118	1,124***
Madhya Pradesh	982	N.A.	N.A.
Madras	950	1,411+	1,488††
Maharashtra	—	1,609	1,696
Mysore	853	1,278	1,210
Orissa	949	1,154	1,309†††
Punjab	991	1,110	1,193
Rajasthan	770	730	1,310
Uttar Pradesh	1,014	1,201	1,277
West Bengal	1,142	1,310	1,325
Andaman & Nicobar Islands	689	1,149	1,244
Delhi	1,467	1,531+	1,678††
Tripura	854	N.A.	N.A.

Real Earnings

The rise in real wages, after making allowance for the rise in the consumer price index, has been as follows :

TABLE 193
INDEX OF REAL EARNINGS OF WORKERS
(1947=100)

	1957	1960	1961	1962*
General index of earnings	170	183†††	194@	201 @
All-India working class consumer price index ..	128	143	145	149
Index of Real earnings ..	134	129†††	134@	135 @

*Provisional.

**Excludes figures relating to industry groups 'Metal Products' (except machinery and transport equipment) and furniture and fixtures (wooden) under Sec. 2m (i) in public sector.

***Excludes figures relating to the industry group 'Basic Metal Industries'.

+Excludes figures relating to industry group 'Textiles' in the public sector.

††Excludes figures relating to establishments in the industry groups 'Textiles' in the public sector and 'Products of Petroleum and Coal' in the private sector.

†††Excludes figures relating to industry group 'Water and Sanitary Services'.

†Estimated.

††Excludes figures relating to the establishments in the industry groups 'Printing, Publishing and Allied Industries' under Sec. 2m (ii) in the private sector, 'Chemical and Chemical Products' in the public sector, 'Products of Petroleum and Coal' in the private sector.

'Non-Metallic Mineral Products' (except products of Petroleum and Coal) under Sec. 2m (i) in the private sector and 'Miscellaneous Industries' under Sec. 2 m (i) in the Public sector.

†††Excludes figures for Madras, Andhra Pradesh and Madhya Pradesh.

@Excludes figures for Madhya Pradesh.

Working Class Consumer Price Index

Tables 194 and 195 show the different series of consumer price indices with base shifted to 1960=100.

TABLE 194
GENERAL CONSUMER PRICE INDEX NUMBERS
FOR INDUSTRIAL WORKERS

Base : 1960=100
(Labour Bureau's New Series)

Centre	1961	1962	Centre	1961	1962
Ahmedabad	102	104	Hyderabad	104	106
Alleppey	102	105	Indore	106	111
Alwaye	104	106	Jaipalguri	101	105
Ammathi	105	114	Jamshedpur	101	105
Amritsar	102	106	Jharia	100	103
Asansol	99	104	Kanpur	101	105
Balaghat	105	111	Kodarma	106	107
Bangalore	105	108	Kolar Gold Fields ..	102	104
Barbil	98	99	Labac	102	111
Bhavanagar	102	104	Mariani	99	101
Bhopal	108	112	Monghyr	104	104
Calcutta	101	107	Mundakayam	103	107
Chikmagalur	102	102	Noamundi	99	100
Darjeeling	99	103	Rangapara	105	109
Delhi	103	107	Raniganj	98	103
Digboi	104	107	Saharanpur	102	106
Doom Dooma	102	104	Sambalpur	100	105
Gudur	106	109	Srinagar	104	108
Guntur	105	112	Varanasi	102	108
Gwalior	106	110	Yamuna Nagar	102	104
Howrah	100	106			

TABLE 195
GENERAL CONSUMER PRICE INDEX NUMBERS
FOR WORKING CLASS*

Base : 1960=100
(Other than Labour Bureau's New Series)

Centre	Original base (=100)	Conversion Factor**	1961	1962
Ajmer .. 1944		1.73	105	107
Bombay .. July 1933 to June 1934		4.20	103	106
Coimbatore .. July 1935 to June 1936		4.94	101	104
Jaipur .. July 1955 to June 1956		1.25	107	109
Madras .. July 1935 to June 1936		4.63	103	105
Madurai .. Do.		4.44	105	108
Nagpur .. August 1939=100		5.12	97	98
Sholapur .. Feb. 1927 to Jan. 1928		3.57	93	107

The general all India average working class consumer price index numbers (base 1949=100) for 1961 and 1962 were 126 and 130 respectively.

Regulation of Wages

The regulation of wages is governed by the Payment of Wages Act, 1936 and the Minimum Wages Act, 1948, as amended subsequently. The former extends to the whole of India except Jammu and Kashmir and applies to persons employed in any factory as defined in the Factories Act, 1948, and in any railway, and in receipt of wages and salaries which average below Rs. 400 a month. The Act has been extended to mines, plantations, docks, wharves or jetties in the ports of Calcutta, Bombay and Visakhapatnam,

*The index number for these centres in the Labour Bureau's new series are not yet published. Hence indices as in the existing series have been given on base shifted to 1960=100

**To obtain the index on original base, the figures given should be multiplied by the conversion factor.

oil-fields in the country excepting the State of Jammu and Kashmir and certain other establishments to which the Act can be extended.

Minimum Wages

The Minimum Wages Act, 1948, empowers the appropriate Government to fix minimum rates of wages payable to employees in industries specified in the Schedule. Such rates have been notified and enforced in most of the scheduled employments. The Act, as amended in 1957, extended, *inter alia*, the date for initial fixation of minimum wages for the employees in scheduled employments, including agriculture, to December 31, 1959. The time limit for initial fixation of minimum wages has been done away within the subsequent Amendment Act of 1961.

Wage Boards

The function of the Wage Boards is to fix a wage structure on the principle of fair wages. Central Wage Boards set up by the Government of India for cotton textiles, sugar, cement and jute industries have submitted their reports. Wage Boards for plantations, iron and steel, coal mining, iron ore, limestone and dolomite mining industries have been set up. A second Wage Board for working journalists has been constituted under the Working Journalists (Conditions of Service) and Miscellaneous Provisions Act, 1955.

Wage Census Scheme

The scheme envisages collection of occupational wage rates and earnings data in respect of workers employed in major factories, mining and plantation industries. Approximately 3,000 sampled establishments were covered in course of the field survey launched in July 1958. Besides having information on the extent of overtime and incentive bonus schemes obtaining in the establishments, a large volume of data relating to wage rate and pay-roll earnings of sample workers were collected occupation-wise. The result of the survey is being embodied in two reports—one general (published in 1963), the other industry-wise (yet to be published). The Second Wage Census Scheme has also been undertaken.

Steering Group on Wages

The Steering Group, consisting of nominees of the Union and State Governments and representatives of workers and employers, studies the trends in relation to wages, production and prices, and plans the collection of material for drawing up a wage map of India, industry-wise and region-wise, for the guidance of wage-fixing authorities.

Coal Mines Bonus Schemes

The Coal Mines Bonus Schemes framed under the Coal Mines Provident Fund and Bonus Schemes Act, 1948, apply to all coal mines in India except those in the State of Jammu and Kashmir. Collieries covered by the schemes till the end of September 1963 totalled 826. Under these schemes, colliery employees other than those in Assam are entitled to receive a third of their basic earnings as quarterly bonus by virtue of a minimum qualifying attendance during the quarter; 2,78,872 workers whose monthly basic earnings did not exceed Rs. 300 qualified for the bonus for the quarter ending June 1963. In Assam, the daily-rated workers are entitled to both weekly and quarterly bonus while the monthly-rated employees get quarterly bonus only.

INDUSTRIAL RELATIONS

Industrial Disputes

In 1962 there were 1,491 industrial disputes (1,630 in 1957) involving 7,05,000 workers (8,89,000 in 1957) and 61,21,000 man-days were lost (64,29,000 in 1957).

Industrial Employment Standing Orders

Under the Industrial Employment (Standing Orders) Act, 1946, the Central Government have framed model rules for adoption by industrial establishments employing 100 workers or more.

The Act was amended in 1961, *inter alia*, empowering the appropriate Governments to extend its provisions to establishments employing less than 100 workers; making provision for appointment of additional certifying officers and enabling the Central Government to delegate its powers to State Governments whenever necessary. The Act was further amended in 1963, making the Model Standing Orders framed by the appropriate Government operative in all industrial establishments covered by it, until the Standing Orders are certified; restricting jurisdiction of the State Industrial Courts to establishments in the State sphere; and enabling State Governments to delegate powers to their officers.

The measure has been extended to all establishments in Gujarat, Maharashtra and West Bengal employing 50 workers or more. In Assam the Act applies to all industrial establishments (except mines, quarries, oilfields and railways) which employ 10 workers or more. In Madras, all the factories registered under the Factories Act, 1948 are within the purview of this measure.

Discipline in Industry

A Code of Discipline has been evolved with the approval of the Indian Labour Conference and the Standing Labour Committee. The employers and workers avoid breaches of the Code by settling their disputes through constitutional methods rather than by resorting to direct action. The implementation organisations at the Centre and in the States, which look into the breaches of the Code, have settled a number of complicated and long-standing disputes. The Evaluation and Implementation Organisation at the Centre has been successful in persuading the parties concerned to withdraw cases pending in High Courts or the Supreme Court and settle them out of court in 48 per cent of the cases so far taken up by it. The Central Employers' and Workers' Organisations have set up committees for dissuading their affiliate members from filing appeals in higher courts against judgments of industrial tribunals or labour courts.

Works Committees

Under the Industrial Disputes Act, 1947, 889 works committees in central undertakings were functioning at the end of the second quarter of 1963.

Tripartite Machinery

The machinery at the Centre mainly consists of the Indian Labour Conference, the Standing Labour Committee, the Industrial Committees and the Committee on Conventions. There is also the Labour Ministers' Conference which is closely associated with the machinery, though not tripartite in character.

Industrial Truce

A joint meeting of the central organisations of employers and workers adopted an Industrial Truce Resolution in November 1962 to the effect that during the Emergency there would be neither interruption nor slowing down of production of goods and services; production would be maximised and defence efforts would be promoted in all possible ways. The resolution laid down steps for promoting industrial peace, production, price stability and savings. A Standing Committee has been set up to supervise implementation of the truce resolution in all its aspects.

Conciliation Machinery

The administration of industrial relations in the central sphere undertakings rests with the Chief Labour Commissioner. To assist the Chief

Labour Commissioner, there is a field organisation consisting of Regional Labour Commissioners, Conciliation Officers and Labour Inspectors. Similarly, the State Governments have their own conciliation machineries headed by the Labour Commissioners.

Adjudication Machinery

There is a three-tier machinery for the adjudication of industrial disputes—Labour Courts, Industrial Tribunals and National Tribunals—all with original jurisdiction. Besides the Labour Courts at Delhi and Dhanbad, there are three Industrial Tribunals at Dhanbad, Bombay and Calcutta. In addition, there is an Industrial Tribunal at Delhi for the Delhi Administration, which is utilised by the Central Government. The States have their own tribunals and labour courts, which also function, when necessary, as *ad hoc* tribunals for the adjudication of disputes in the central sphere. National Tribunals are set up as and when necessary.

Workers' Participation in Management

The scheme for workers' participation in management is in operation in 29 undertakings. The desirability for extending the scheme to as many establishments as possible has been recognised on all hands and efforts are now being directed towards this end. The sub-committee of the Indian Labour Conference has since been reconstituted as an independent body and designated as the Committee on Labour Management Co-operation. The Central and State Governments have set up special agencies for expeditious implementation of the scheme.

Code of Efficiency

A committee has been appointed to explore means for realising the objectives for which the Code of Efficiency was suggested by the sub-committee of the Indian Labour Conference in December 1959.

Workers' Education

The Central Board for Workers' Education consisting of representatives of Government, both Central and State, organisations of employers and labour and educationists, is a registered society which implements the workers' education scheme in three distinct phases, namely the training of top-level instructors known as Education Officers, of worker-teachers and of workers. Two hundred Education Officers, of whom 124 joined service with the Board, were trained by the end of November 1963. The Board has established 21 regional and 20 sub-regional workers' education centres in the country, which trained 3,666 worker-teachers and had 276 of them under training by the end of November 1963. One thousand six hundred and six unit level classes were in existence at the end of November 1963, which had trained 89,698 workers and were imparting training to 26,087 other workers.

TRADE UNIONS

Tables 196 and 197 show the number and membership of the registered trade unions in India and of those affiliated to the four national federations.

TABLE 196
REGISTERED TRADE UNIONS AND MEMBERSHIP

	Central Unions		State Unions	
	1955-56	1961-62*	1955-56	1961-62*
Number of unions on registers ..	174	225	7,921	7,636
Number of unions submitting returns ..	105	174	3,901	4,557
Membership of unions submitting returns ..	2,12,848	4,18,801	20,61,884	20,15,111

* Provisional. Does not include figures for Andhra Pradesh, Assam, Uttar Pradesh and West Bengal.

TABLE 197

MEMBERSHIP OF ALL-INDIA ORGANISATIONS

		Number of Unions affiliated			Membership		
		1958	1959	1960	1958	1959	1960
Indian National Trade Union Congress ..		727	886	860	9,10,221	10,23,371	10,53,386
All-India Trade Union Congress		807	814	886	5,37,567	5,07,654	5,08,662
Hind Mazdoor Sabha ..		151	185	190	1,92,948	2,41,636	2,86,202
United Trade Union Congress		182	172	229	82,001	90,629	1,10,034
TOTAL ..		1,867	2,057	2,165	17,22,737	18,63,290	19,58,584

SOCIAL SECURITY

Employees' State Insurance Scheme

The provisions of the Employees' State Insurance Act, 1948, apply to all perennial factories using power and employing 20 or more persons and cover labourers and clerical staff with monthly earnings up to Rs. 400.

By the end of November 1963 the insurance scheme was extended to about 20.12 lakh industrial workers in 157 centres in the country. Medical care was provided to about 20.77 lakh units of families of insured workers. At the end of 1962-63, employees' contribution stood at Rs. 6.02 crores and employers' contribution at Rs. 6.54 crores. A sum of about Rs. 5.29 crores was given to insured persons by way of benefits, of which Rs. 3.55 crores accounted for sickness, Rs. 20.07 lakhs for maternity, Rs. 1.175 crores for disablement and Rs. 36.36 lakhs for dependants.

Employees' Provident Fund

The Employees' Provident Funds Act, 1952, which was originally applied to six major industries to provide for the benefit of compulsory provident fund to industrial workers, covered 84 industries and establishments at the end of January 1964. The Act applies to such of the factories and establishments in the industries covered as have completed three years of existence where the employment strength is 50 or more, and five years of existence where the employment strength is 20 or more, but less than 50 persons.

All the employees in the factories and establishments covered drawing basic wages and dearness allowances including the cash value of food concessions, if any, and the retaining allowances, if any, not exceeding Rs. 1,000 per month, are eligible for membership of the Fund, after completing one year's continuous service or 240 days' actual work during a period of 12 months or less. The employees have to contribute at the rate of $6\frac{1}{2}$ per cent of basic wage, dearness allowance including the cash value of food concession and retaining allowances, if any, while the employers have to contribute at the same rate for their employees. The employees may, if they so desire, contribute at a higher rate up to $8\frac{1}{2}$ per cent. At the end of October 1963, the number of exempted and unexempted establishments covered under the Act was 24,345. The corresponding number of subscribers to the Fund was 37,61,974, while the provident fund contributions amounted to Rs. 437.79 crores, and Rs. 134.11 crores were refunded to outgoing members.

A Death Relief Fund ensuring a minimum assistance of Rs. 500 to nominees/heirs of deceased members has been set up.

The Act, as amended, empowers the Central Government to specify by notification any establishment or class of establishments to which the enhanced rate of 8 per cent would apply. It also specifies certain industries where the employers and the employees compulsorily contribute at the rate of 8 per cent.

Coal Mines Provident Fund Schemes

The Coal Mines Provident Fund Schemes framed under the Coal Mines Provident Fund and Bonus Schemes Act, 1948, apply to all coal mines in India except the State of Jammu and Kashmir. One thousand two hundred and thirty-six collieries and organisations were covered under the Schemes by the end of September 1963. In terms of the schemes, the employee and the employer are to contribute at the revised rate of 8 per cent of the total emoluments of the employee. From June 1963 onwards, the employees can also contribute, voluntarily, up to 8 per cent of their emoluments over and above the compulsory contribution without any similar obligation on the employers. The number of subscribers to the Fund was 4,09,910 and the amount of the Fund which is invested in Central Government securities was about Rs. 37.97 crores at the end of September 1963.

Maternity Benefits

Legislation concerning the payment of maternity benefits is in operation in almost all the States. Some of the State Acts apply to all regulated factories within their jurisdiction, while others apply to non-seasonal factories only. The qualifying period and the rates of benefit vary from State to State. Two Central Acts—the Employees' State Insurance Act, 1948 and the Plantations Labour Act, 1951—also regulate payment of maternity benefits. The Maternity Benefit Act, 1961, was enacted to provide uniform standards for maternity protection. It applies in the first instance to all factories, mines and plantations, except those to which the Employees' State Insurance Act applies. The Act was brought into force in mines from November, 1963. In establishments other than mines, its administration is the responsibility of State Governments. So far, Kerala, Andhra Pradesh and West Bengal have brought it into effect in such establishments.

Workmen's Compensation

The Workmen's Compensation Act, 1923, as amended in 1962, raised the wage limit for coverage of compensation under the Act from Rs. 400 to Rs. 500 and revised the rates of compensation.

LABOUR WELFARE

Provision for amenities such as canteens, creches, rest shelters, washing facilities, medical aid and for the appointment of welfare officers has been made in respect of industries and establishments covered by the Factories Act, 1948, the Mines Act, 1952, and the Plantations Labour Act, 1951. In addition, legislative measures for the constitution of Funds for financing welfare schemes in coal and mica mines have been enacted and are in force.

Motor Transport Workers' Act

In May, 1961, the Motor Transport Workers' Act was enacted to provide for the welfare of motor transport workers and to regulate the conditions of their work. It contains provisions for canteens, rest rooms, uniforms, hours of work, leave, etc. The Governments of Andhra Pradesh, Assam, Bihar, Delhi, Maharashtra, Punjab, Uttar Pradesh and West Bengal have so far framed rules under the Act.

Coal Mines Labour Welfare Fund

The Fund maintains 2 central hospitals, 8 regional hospitals-cum-maternity and child welfare centres, 3 dispensaries, a T.B. clinic and a T.B.

hospital. Anti-malaria measures and a scheme of domiciliary treatment are also in operation.

The Fund is also running adult education centres, women's welfare centres, children's parks and a family counselling service. A scheme for imparting elementary education to miners' children is in progress.

Under the housing subsidy-cum-loan scheme 3,698 houses have been constructed and 103 are under construction. The allocation of 31,022 houses amongst collieries under the new Housing Scheme has been completed; of these construction work on 15,612 houses has been completed and 13,786 houses are under construction. Out of 25,000 houses and 417 barracks sanctioned under the Low Cost Housing Scheme, 1,896 houses and 9 barracks have been constructed and work on 5,915 houses and 38 barracks is in progress. The earnings of the Fund are estimated to be Rs. 3,28,54,000. The expected expenditure on general welfare measures and that on housing was Rs. 2,98,14,600 for the year 1963-64.

The organisation managing the activities of the Fund has also set up three central consumer co-operative stores and 318 co-operative stores/societies which receive financial assistance from the Fund.

Mica Mines Labour Welfare Fund

The Fund provides medical, educational and recreational facilities for mica mine workers. Three hospitals have been established by the Fund at Karma (Bihar), Kalichedu (Andhra Pradesh) and Tisri (Bihar) and another is being established at Gangapur (Rajasthan). Several dispensaries with maternity and child welfare centres are attending to the medical needs of mica miners. Nine mobile dispensaries are also in operation in certain areas. The Fund maintains several primary schools, awards scholarships and distributes books and stationery free of cost. During 1963-64 the sums provided to the mica producing States included Rs. 5.97 lakhs to Andhra Pradesh, Rs. 15.70 lakhs to Bihar and Rs. 6.25 lakhs to Rajasthan.

Iron Ore Mines Labour Welfare

The Iron Ore Mines Labour Welfare Cess Act, 1961, has been enacted to provide for the levy and collection of a cess for promoting welfare of labour employed in the iron ore mining industry as is being done for coal and mica miners under the Coal and Mica Mines Labour Welfare Funds. The Act was enforced in the whole of India except Jammu and Kashmir and the Union Territory of Goa, Daman and Diu with effect from the 1st October 1963. To begin with cess is being levied at the rate of 25 naya paise per metric tonne.

Safety Measures in Mines

The Mines Act, 1952, and the rules, regulations and bye-laws made thereunder, provide for the regulation of labour and safety in mines. The fatality rate per thousand persons in coal mines declined from 0.73 in 1956 to 0.61 in 1962 while the rate for all mines remained constant at 0.53. A National Mines Safety Council including representatives of mine owners, workers and mine managers, has been set up for promoting safety through education and propaganda.

Welfare of Plantation Labour

Under the Plantations Labour Act, 1951, all plantations are required to provide housing accommodation to their resident workers and their families and to maintain hospitals or dispensaries. Some of them also run elementary schools for the education of the labourers' children. Recreational facilities and training in useful handicrafts such as tailoring, knitting, weaving and basket-making, are provided in some of the tea estate centres with the help of donations from the Tea Board.

The Act has been amended to check, *inter alia*, fragmentation of plantations by employers in order to escape the liabilities.

Labour Welfare Funds in Central Government Industrial Undertakings

These welfare funds were created on a voluntary basis in 1946 for financing welfare activities among workers.

Labour Welfare Centres

Most States and Union Territories are running a number of welfare centres. These centres cater to the recreational, educational, vocational and cultural needs of the workers and their children. All private industrial establishments of some standing also maintain welfare centres for the benefit of their workers.

Relief and Assistance for the Handicapped

The Third Plan provides Rs. 2 crores for setting up a Relief and Assistance Fund for Handicapped Groups. To begin with State Governments and Union Territories have been asked to set up pilot projects to provide assistance, through local bodies, to the old and handicapped and to destitute women and children on a limited scale. In the pilot stage, 25 per cent of the expenditure will be borne by the local community while the rest will be provided by the Central Government, administrative costs being the responsibility of the State Governments.

CHAPTER XXV

HOUSING

The problem of housing in India is a complex one requiring finances on a large scale and dependent for its solution on concerted efforts on the part of individuals, co-operatives, and State and Union Governments, to be planned and executed over a number of years. There is acute shortage of housing in urban and rural areas and much of the available accommodation is qualitatively of sub-standard variety. The shortage in urban areas has been largely due to considerable increase in population since 1921, the heavy shift of population from the rural to the urban areas, the haphazard growth of towns due to lack of sufficient State or municipal control over building activity and the comparative inability of private enterprise to keep pace with the growing demand.

The responsibility of Government and public bodies to provide adequate accommodation for their employees was recognised even before Independence. The Government of Bombay pioneered in this direction in 1921 by establishing a Development Department. The effort, which was discontinued after 15,000 tenements were built, was resumed in 1949 and a special Housing Board was set up for building houses for industrial workers and other low income groups, developing land and assisting in the production and distribution of building materials. Improvement Trusts in Bombay, Calcutta, Madras and Kanpur also undertook public housing schemes. Municipalities have also been engaged in building houses not only for their essential staff, but occasionally for low income groups in general. The Municipalities and Improvement Trusts, however, operate under severe limitations, particularly in the matter of finance.

The activities of the Central Government till 1950 were confined largely to providing houses for their employees, particularly in the essential services. The influx of displaced persons from Pakistan provided the Union Government an opportunity to undertake for the first time a large-scale housing programme for persons other than their own employees. A similar extension of State activity was made in West Bengal, Assam, Bihar, Orissa and Punjab.

The record of private employers is not uniform in respect of provision of houses for their workers. While a number of employers have invested part of their earnings in providing better living conditions for their workers, construction of houses by employers generally in post-war years has fallen short of expectations. Co-operative housing societies, particularly in Madras, Maharashtra and Uttar Pradesh, have also attempted, though to a limited extent, to provide accommodation for middle and low income groups.

The bulk of the building activity has, however, throughout been in the hands of private enterprise, which for a variety of reasons has been unable to keep pace with demand.

According to the 1961 Census, there were 789 lakh occupied residential houses in the country—651 lakhs in the rural areas and 138 lakhs in the urban areas. Out of these, about 19 per cent or 124 lakh houses were pucca in the rural areas and 45 per cent or 62 lakh houses were pucca in the urban areas. The shortage of pucca houses was, therefore, 527 lakhs in the rural areas and 76 lakhs in the urban areas. The number of rural households was about 689 lakhs or 38 lakhs in excess of the rural houses, and the number of urban households was about 156 lakhs, or 18 lakhs in excess of the urban houses. If this excess in the number of households over the

number of houses is taken into account, the effective shortage of pucca houses would be somewhat higher than that indicated above.

Since May 1952, when a separate portfolio for Housing was created in the Union Government, organised efforts are being made on a governmental basis to step up housing activities in general and in particular to provide suitable financial assistance for construction of houses to individuals, co-operatives, industrial employers, planters, local bodies, etc., through the introduction of various housing schemes. Annual conferences of State Ministers and occasional seminars, symposia and exhibitions have helped in creating a keen sense of awareness of the gravity of the problem and crystallising the progressive action to be taken to meet the situation. Corresponding to the Housing Wing in the Union Ministry of Works, Housing and Rehabilitation, the State Governments have established separate departments (or boards) for promoting housing activities. Statutory Housing Boards have been established in Andhra Pradesh, Madhya Pradesh, Madras, Maharashtra, Mysore and Gujarat, and a non-statutory Housing Board has been set up in West Bengal.

PROGRESS UNDER THE PLANS

The period of the First Five Year Plan was devoted to the formulation of the initial stages in the evolution of a national housing programme. Two urban housing schemes envisaging an expenditure of Rs. 38.5 crores were initiated for the construction of 1,20,000 dwelling units. This effort was supplemented by housing programmes for certain sections of the population like displaced persons, Government servants, etc., launched by the Central and State Governments and local authorities. It has been estimated that public authorities provided about 7,00,000 houses or tenements during the First Plan period.

During the Second Five Year Plan period, six more schemes were promulgated. Disbursement from Government sources provided funds to the extent of Rs. 84 crores while Rs. 17.2 crores came from the Life Insurance Corporation. Substantial housing programmes of their own were also undertaken outside these schemes by the Union and State Governments as well as local bodies. The total outlay on public housing during the Second Plan period was of the order of Rs. 250 crores and 5,00,000 houses were constructed. In the private sector, an investment of about Rs. 1,000 crores is estimated to have gone into housing and other private construction. Considerable attention has also been paid by public authorities to the question of improving housing conditions in rural areas.

For the Third Five Year Plan, the total provision for social housing schemes is Rs. 182 crores consisting of Rs. 122 crores from Plan resources and Rs. 60 crores from the Life Insurance Corporation. The total number of houses sanctioned in the first three years of the Third Plan is 1,25,227 against the target of 4,35,000; this leaves a balance of 3,09,773 houses to be sanctioned during the remaining two years of the Plan. In financial terms a total of Rs. 86.04 crores has been allocated against a Plan provision of Rs. 182 crores.

A brief resume is given below of the progress made under the public housing schemes launched by the Union Government to help the State Governments to provide better housing conditions.

Subsidised Industrial Housing Scheme

The Subsidised Industrial Housing Scheme, which came into operation in September 1952, envisages the grant of long-term, interest-bearing loans and liberal subsidies by the Government of India to the State Governments and through them to other approved agencies, such as statutory housing boards, local bodies, industrial employers and registered co-operative

societies of industrial workers. The assistance is for construction of houses for industrial workers, covered by Section 2(1) of the Factories Act, 1948, and mine workers (other than those engaged in coal and mica mines) falling within the meaning of Section 2(h) of the Mines Act, 1952. The financial assistance and the number of houses sanctioned under the Scheme till the end of 1963 are shown in the following table.

TABLE 198
SUBSIDISED INDUSTRIAL HOUSING

Agency	Assistance sanctioned (in crores of rupees)			No. of houses sanctioned
	Loan	Subsidy	Total	
State Governments ..	23.49	22.51	46.00	1,23,895
Private employers ..	4.50	2.78	7.28	31,258
Co-operative societies of industrial workers ..	1.38	0.57	1.95	6,241
Central Government (in Delhi) ..	—	—	0.95	2,664
Total	29.37	25.86	56.18	1,64,058

About 1,25,000 houses were completed till the end of September 1963.

Low Income Group Housing Scheme

The Low Income Group Housing Scheme, which was introduced in November 1954, provides for the grant of long-term, interest-bearing loans to the State Governments for the purpose of housing persons having an annual income not exceeding Rs. 6,000. The total loan assistance admissible under the scheme is 80 per cent of the cost (including cost of land) subject to a maximum of Rs. 8,000 per house. Short-term loans, repayable in a period not exceeding five years, are also advanced under the Scheme by the Central Government to the State Governments for acquisition and development of land and for the subsequent sale of the developed sites to eligible persons on a no-profit-no-loss basis.

A sum of Rs. 54.12 crores inclusive of Rs. 1.82 crores released by the Life Insurance Corporation was drawn by the State Governments/Union Territories Administrations under the Scheme till March 31, 1963. Another sum of Rs. 6.77 crores was likely to be disbursed to State Governments and Union Territories during 1963-64. Up to the end of 1962, 1,16,139 houses were sanctioned and 83,587 houses were completed by the end of 1963.

The Scheme has been amended to enable public authorities to provide houses to economically weaker sections of the community on subsidised rents. The entire cost of such houses is met by the Central Government, 75 per cent in the form of loan and 25 per cent in the form of subsidy.

The State Governments have also been authorised to utilise up to 10 per cent of their annual allocation for the provision of amenities like schools; dispensaries, welfare centres, post offices, shops, police posts, etc., in colonies built by them or their agencies under the Scheme.

Plantation Labour Housing Scheme

The Plantation Labour Act, 1951, makes it obligatory for every planter to provide housing accommodation for all his resident workers. A scheme known as the Plantation Labour Housing Scheme was formulated in April 1956 to help planters, specially the smaller ones, to fulfil this obligation. The Scheme envisages the grant of assistance in the form of interest-bearing

loans (to the extent of 80 per cent of the cost of houses) to the planters through the State Governments. In view of the slow progress of the Scheme, a Working Group, set up by the Ministry of Labour and Employment, has been examining all aspects of plantation labour housing, including the question of grant of subsidies to the planters on the lines of the Subsidised Industrial Housing Scheme.

The planters have been experiencing practical difficulties in taking advantage of the Scheme, in view of their inability to furnish the security prescribed by the State Governments for the loans. The State Governments have, therefore, been asked to constitute a "Pool Guarantee Fund" to indemnify themselves against bad debts that they might incur as a result of relaxation of the security provisions. The Pool Guarantee Fund is to be raised by charging an additional interest at $\frac{1}{2}$ per cent per annum. The losses, if any, in excess of the assets in the Fund, would be shared equally by the Government of India, the State Government and the Commodity Board concerned. Since the inception of the Scheme in April 1956, the State Governments have sanctioned projects for 1,362 houses costing Rs. 29.54 lakhs, but the number of houses actually completed so far is 700 only. Against these sanctions, the State Governments have disbursed Rs. 14.89 lakhs to the planters.

Slum Clearance Scheme

The Slum Clearance Scheme came into operation in May 1956. Under this Scheme, financial assistance for slum clearance work is given to the State Governments and through them to municipal and local bodies. Financial assistance is envisaged for rehousing of families residing in slums and whose income does not exceed Rs. 250 per mensem in Bombay, Calcutta and Delhi, and Rs. 175 per mensem elsewhere. The Scheme is for the present confined mainly to Bombay, Calcutta, Madras, Delhi, Kanpur and Ahmedabad where the problem has to be tackled without delay. Other urban areas are also eligible for Central assistance if slum clearance work is justified.

Two hundred and fifty-nine slum clearance/improvement projects formulated by the State Governments were sanctioned or approved till the end of 1963, for construction of 70,400 housing units at an estimated cost of Rs. 22.10 crores, out of which 33,400 housing units were completed. In the Union Territories, projects costing about Rs. 3.20 crores have been sanctioned for construction of about 7,500 dwelling units, out of which more than 7,000 units have been completed. In addition, 4,720 plots of 80 sq. yds. and 7,669 plots of 25 sq. yds. each have been developed in Delhi under the Jhuggis and Jhopris Removal Scheme, for allotment to squatters, who have been squatting on Government/public land in Delhi. Twenty-two thousand two hundred and seventy housing units were completed by the end of September 1962. Six thousand and thirteen houses, and 121 shops were constructed in Delhi till the end of 1962.

Village Housing Projects

The Village Housing Projects Scheme, which was introduced in October 1957, envisages the establishment of housing projects in about 5,000 villages mostly selected from suitable Community Development Blocks. It is based on the principle of aided self-help. Financial assistance is given in the form of loans to the extent of two-thirds of the construction cost or Rs. 2,000, whichever is less. Technical advice and guidance is provided free of charge through the Rural Housing Cells set up by the State Governments for this purpose and also through the Block Development staff.

All the 5,000 villages allotted for development under the Scheme were selected, survey conducted in 3,400 villages and layout plans drawn up for 2,600 of them. Loans amounting to Rs. 5.08 crores were sanctioned by State Governments for construction of 41,000 houses. A sum of Rs. 4.08 crores was disbursed to beneficiaries, and 16,200 houses were completed.

About one half of the funds allocated under the Scheme may now be utilised for provision of house sites for landless agricultural workers and for laying of streets and drains in the selected villages.

Land Acquisition and Development Scheme

The Scheme, introduced in October 1959, provides for grant of loan assistance to State Governments to facilitate acquisition and development of land on a large scale for making developed plots available at reasonable prices to intending house-builders, more particularly to those in the lower income brackets. The Scheme is also intended to help in the stabilisation of land prices, rationalisation of urban development and promotion of self-sufficient composite colonies.

A sum of Rs. 2.20 crores was drawn by the State Governments during the Second Plan period. The Third Five Year Plan envisages an overall provision of Rs. 26 crores for the Scheme. Rs. 9.5 crores are to be found from Government sources and the balance to be provided from the contributions to be made by the Life Insurance Corporation. The State Governments are expected to constitute a Revolving Fund out of the loan assistance released to them from time to time, for the purpose of the Scheme.

Commitments up to Rs. 32.21 crores for acquisition and development of 15,615 acres of land have so far been entered into by the States. Against these, about 3,567 acres have been acquired and about 1,649 acres are under development.

Middle Income Group Housing Scheme

This Scheme introduced in February 1959, as a non-Plan scheme financed through funds drawn from the Life Insurance Corporation, envisages grant of house-building loans to individuals or co-operative societies of persons whose income ranges between Rs. 6,001 and Rs. 15,000 per annum. The total loan assistance admissible under the scheme is 80 per cent of the cost (including the cost of land) subject to a maximum of Rs. 20,000 per house. The Life Insurance Corporation of India has so far advanced about Rs. 14.18 crores for the purpose. Up to the end of 1963, the State Governments and Union Territories had sanctioned under this Scheme loans amounting to about Rs. 20.80 crores for construction of 13,133 houses, out of which 6,156 had been completed.

Rental Housing Scheme for State Government Employees

This Scheme which is being financed from the Life Insurance Corporation funds, is intended to assist the State Governments in providing accommodation to their low-paid employees and was introduced in 1959. Up to the end of 1963, State Governments had sanctioned the construction of 11,000 houses, at a cost of Rs. 10.74 crores, out of which 6,727 houses had been completed.

NATIONAL BUILDINGS ORGANISATION

The National Buildings Organisation was set up in July 1954, to ensure a rational approach to the problem of housing and to achieve reduction in building costs through development of building materials, techniques, designs and practices, and generally to help in the promotion of building activities through co-ordination of research and dissemination of useful information. The Organisation also serves as the Regional Housing Centre for the Dry Tropical Zones of the ECAFE region in collaboration with the United Nations Technical Assistance Organisation.

The Organisation has a well-equipped library of publications and films and publishes quarterly and monthly journals. It has also brought out a number of publications on building science and allied subjects.

The Organisation co-ordinates the activities of Regional Research-cum-Training Centres on Rural Housing set up by the Government of India in six existing engineering institutions located at Bangalore, Anand Sibpur,

Roorkee, Chandigarh and New Delhi for promoting research in the improved utilisation of local building materials and in the development of designs and construction techniques for village houses. These Centres also train technical personnel employed by the State Governments in the planning and implementation of projects under the Village Housing Projects Scheme and design and construct research-cum-demonstration houses in 'laboratory villages'.

Short-term training courses on (i) Timber Engineering, (ii) Exact and Economical Designs of Multi-storeyed Buildings, and (iii) Organisation and Utilisation of a Technical Library, were conducted by the Organisation in 1963.

CHAPTER XXVI

STATES AND UNION TERRITORIES*

ANDHRA PRADESH

Area : 1,06,286 sq. miles *Population* : 3,59,83,447 *Capital* : Hyderabad
Principal language : Telugu

Governor : A. Pattom Thanu Pillai

COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
K. Brahmananda Reddy	Chief Minister, Planning, Major Industries, General Administration, Law and Order, Legislature and Election
N. Ramachandra Reddy	Commercial Taxes
M. Chenna Reddi ..	Finance, Medium and Small Industries
M. N. Lakshminarasiah ..	Panchayati Raj, Panchayats, Bureau of Economics and Statistics, Accommodation Control and Small Savings
T. Ramaswamy	Co-operation
A. C. Subba Reddi ..	Public Works
Ahmed Ali Khan ..	Home
Y. Sivarama Prasad ..	Health
P. V. Raju	Education

Ministers of State

Smt. T. N. Sadalakshmi ..	Social Welfare
Alapati Venkataramiah ..	Municipal Administration and Housing and Endowments
M. R. Appa Rao	Excise and Prohibition and Cultural Affairs
P. V. Narasimha Rao ..	Law and Prisons
A. Balarami Reddi ..	Agriculture
B. V. Gurumurthy	Transport, Labour, Information, Public Relations and Tourism

Chief Secretary

M. P. Pai

HIGH COURT

<i>Chief Justice</i>	P. Chandra Reddy
<i>Puisne Judges</i>	P. Satyanarayana Raju, N. D. Krishna Rao, Manohar Parshad, P. J. Reddy, P. Basi Reddy, N. Kumarayya, K. V. G. Nair, G. Chandrasekhara Sastri, H. Anantanarayan Ayyar, K. V. L. Narasimham, Sharifuddin Ahmad, E. Venkatesam, Gopal Rao Ekbote, Mohd. Mirza

<i>Advocate-General</i> ..	B. V. Subramaniam
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PUBLIC SERVICE COMMISSION

<i>Chairman</i>	Ghulam Hyder
<i>Members</i>	Y. Pitchi Reddy, W. Venkataswami Naidu, G. Simhadri

LEGISLATIVE ASSEMBLY

<i>Speaker</i> : B. V. Subba Reddy	<i>Deputy Speaker</i> : Vasudev Krishnaji Naik
107. <i>Kalwakurthi</i> : Smt. T. Shantabai (Con.)	277. <i>Vayalpad</i> : P. Thiruma Reddy (Con.)
113. <i>Kankipadu</i> : M. Lakshmaraswamy (CPI)	

LEGISLATIVE COUNCIL

<i>Chairman</i> : M. Hanumantha Rao	<i>Deputy Chairman</i> : G. Subba Raju
30. Smt. Annapurnamma .. ..	.. Legislative Assembly

* For a list of the names of the Members of the State Legislatures, 'India 1962' may be consulted. The present edition of the Reference Annual notices only the changes that have occurred between June 1, 1963 and May 31, 1964. The new names, or vacancies as the case may be, are shown against the relevant serial numbers as occurring in 'India 1962'. The personnel of the State Councils of Ministers, High Courts and Public Service Commissioners are also as on May 31, 1964.

BUDGET OF THE GOVERNMENT OF ANDHRA PRADESH

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	7,55.88	8,22.68	8,34.99
Estate Duty	35.00	35.00	35.00
Land Revenue (net)	15,13.00	16,46.48	16,50.00
State Excise Duties	9,45.99	11,02.26	11,49.73
Stamps	3,16.50	2,92.51	3,18.83
Forest	4,00.00	4,00.00	4,01.69
Registration	1,40.30	1,40.70	1,44.64
Taxes on Vehicles	3,71.47	4,90.00	5,00.00
Sales Tax	15,14.00	17,60.00	18,00.00
Other Taxes and Duties	1,42.41	1,99.65	1,47.64
Irrigation, Navigation, Embankment and Drainage Works (net)	2,72.81	2,77.96	2,74.79
Debt Services	12,91.51	13,30.43	14,83.56
Civil Administration	6,95.67	6,63.67	6,84.42
Public Works and Miscellaneous Public Improvements (net)	74.47	74.47	74.47
Electricity Schemes	1,63.67	1,75.32	1,71.63
Miscellaneous	1,73.60	2,36.24	1,71.71
Contributions and Miscellaneous Adjustments between Central and State Governments	30,29.52	31,37.70	36,04.47
GRAND TOTAL—REVENUE RECEIPTS	1,18,35.80	1,29,05.07	1,36,00.42
REVENUE EXPENDITURE			
Direct Demands on the Revenue	5,74.32	4,32.15	4,92.10
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	7,65.60	8,68.26	8,63.69
Debt Services (net)	12,92.26	19,00.54	15,80.25
General Administration	7,36.78	7,40.74	7,87.42
Administration of Justice	1,38.54	1,32.33	1,40.78
Jails	58.75	57.75	61.74
Police	6,48.36	6,25.58	6,53.80
Scientific Departments	12.90	12.94	14.44
Education	22,21.17	22,92.24	25,97.71
Medical	6,10.16	6,64.95	7,36.19
Public Health	2,94.55	2,78.08	2,82.24
Agriculture	4,35.41	4,41.20	5,80.05
Animal Husbandry	2,10.00	1,92.05	2,33.11
Co-operation	1,75.90	1,94.49	2,00.47
Industries and Supplies	2,11.46	2,11.19	2,41.62
Miscellaneous Departments	4,83.82	4,92.92	5,90.25
Public Works and Miscellaneous Public Improvements	10,84.89	11,21.04	13,20.83
Electricity Schemes	2,89.52	3,23.09	3,44.23
Miscellaneous	9,84.87	11,40.93	12,20.61
Extraordinary, including Community Projects, NES, and Local Development Works	5,96.54	5,51.98	6,44.23
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	1,18,25.80	1,26,74.45	1,35,85.76
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(+)10.00	(+)2,30.62	(+)14.66

ASSAM

Area : 78,529 sq. miles * *Population* : 1,22,09,330* *Capital* : Shillong
Principal languages : Assamese and Bengali

Governor : Vishnu Sahay
COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
Bimala Prasad Chaliha	Chief Minister, Appointments, Home, Political, General Administration, Secretariat Administration Department, Information and Publicity, Minority Affairs, Public Works Department (Roads and Buildings), and General Co-ordination
Fakhruddin Ali Ahmed	Finance, Law, Panchayats and Community Projects
Karnakhya Prasad Tripathi	Power (Electricity), Industries (including Cottage Industries), Planning and Development, Town and Country Planning, Labour and Statistics
Siddhinath Sarma ..	Revenue, Forests, Transport and Political Sufferers
Dev Kanta Barooah ..	Education, Co-operatives and Tourism
Baidyanath Mookerjee	Medical, Excise, Printing and Stationery
Moinul Haque Chowdhury	Flood Control and Irrigation, Agriculture, Veterinary and Livestock, Pisciculture and Parliamentary Affairs
Rupnath Brahma ..	Supply, Trade and Commerce, Registration and Stamps, Relief and Rehabilitation
Mahendra Nath Hazarika	Khadi and Village Industries, Sericulture and Weaving and
Chatrasing Teron ..	Jails Tribal Areas and Welfare of Backward Classes, Local Self-Government and Social Welfare

<i>Ministers of State</i>	
Girindra Nath Gogoi	Public Works Department (Roads and Buildings)
Radhika Ram Das ..	Revenue
Emerson Sangma ..	Tribal Areas

<i>Deputy Ministers</i>	
Lalit Kumar Doley ..	Tribal Areas and Welfare of Backward Classes, Co-operatives and Forests
Smt. Komol Kumari Barua	Education and Social Welfare
Davendra Nath Hazarika	Panchayats and Community Projects

Parliamentary Secretary
 Sai Sai Terang

Chief Secretary
 A. N. Kidwai

HIGH COURT

<i>Chief Justice</i>	Gopalji Mehrotra
<i>Puisne Judges</i>	C. Sanjeevarow Nayudu, S. K. Dutta
<i>Advocate-General</i> ..	B. C. Barua

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	H. C. Bhuyan
<i>Member</i>	Abdul Hai

LEGISLATIVE ASSEMBLY

Speaker : Mahendra Mohan Choudhury

Deputy Speaker : Dandeswar Hazarika

Newsgang : Roop Ram Sut (Con.)

*Including NEFT.

BUDGET OF THE GOVERNMENT OF ASSAM

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	5,79.51	7,01.66	6,84.74
Estate Duty	10.00	10.00	10.00
Land Revenue (net)	4,19.65	3,49.03	4,71.88
State Excise Duties	1,96.48	2,17.80	2,25.14
Stamps	56.96	81.68	83.21
Forest	2,00.00	2,17.47	2,36.82
Registration	9.50	9.50	9.69
Taxes on Vehicles	88.59	1,27.51	1,32.82
Sales Tax	4,25.81	4,98.12	5,49.17
Other Taxes and Duties	2,53.97	1,50.97	2,79.86
Irrigation, Navigation, Embankment and Drainage Works (net)	1.55	1.86	1.89
Debt Services	16.48	25.41	27.38
Civil Administration	1,47.56	1,47.49	1,46.43
Public Works and Miscellaneous Public Improvements (net)	28.07	28.61	31.20
Miscellaneous (net)	2,34.86	2,41.64	2,28.51
Contributions and Miscellaneous Adjustments between Central and State Governments	25,94.61	25,68.77	30,59.61
GRAND TOTAL—REVENUE RECEIPTS	52,63.60	53,77.52	61,78.35
REVENUE EXPENDITURE			
Direct Demands on the Revenue	2,24.86	2,25.67	2,49.67
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	1,00.74	1,73.01	1,23.64
Debt Services (net)	3,73.13	5,26.14	4,90.92
General Administration	1,50.01	1,54.79	1,55.50
Administration of Justice	26.66	26.67	28.24
Jails	30.31	32.77	34.56
Police	7,43.34	8,04.64	7,98.79
Scientific Departments	8.86	9.11	10.98
Education	9,38.01	10,08.36	11,90.46
Medical	2,51.70	2,55.77	2,92.04
Public Health	1,73.60	1,76.42	1,85.47
Agriculture and Rural Development	2,72.73	2,78.49	3,17.32
Animal Husbandry	77.59	77.80	85.40
Co-operation	55.50	61.37	74.18
Industries and Supplies	94.70	95.50	1,28.81
Miscellaneous Departments			
Civil Works and Miscellaneous Public Improvements	815.57	9,07.90	8,94.49
Miscellaneous	2,82.67	3,16.85	3,11.43
Extraordinary, including Community Projects, NES, and Local Development Works	3,72.91	3,21.16	3,96.03
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	50,96.61	55,56.89	59,06.66
SURPLUS (+) DEFICIT(—) ON REVENUE ACCOUNT	(—)1,66.99	(—)1,79.39	+2,71.69

BIHAR

Area : 67,196 sq. miles
Principal language: Hindi

Population : 4,64,55,610

Capital : Patna

Governor : M. Ananthasayanam Ayyangar

COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
K. B. Sahay	Chief Minister, Political Appointments, Industries, Finance, Labour, Planning and Forests
S. N. Sinha	Education, Agriculture and Local Self-Government
M. P. Sinha	River Valley Projects, Irrigation and Power
B. C. Patel	Land Revenue
A. Q. Ansari	Public Health and Jails
H. N. Mishra	Co-operation
R. L. Singh Yadav	Public Works and Public Health Engineering
Jafar Imam	Law and Excise
Mungeri Lal	Food, Supply, Commerce and Animal Husbandry
S. K. Bage	Community Development and Gram Panchayats
Smt. Sumitra Devi	Information

Ministers of State

Ambika Sharan Singh	Finance, Taxation, Statistics, Audit and National Savings
Dumar Lal Baitha	Housing and Welfare (excluding Scheduled Tribes)
Grish Tiwary	Education
N. K. Sinha	General Administration and Jails
Sahdeo Mahto	River Valley Projects, Irrigation, Power Law and Excise
Bariar Hembrom	Welfare of Scheduled Tribes
Raghavendra Narain Singh	Transport
Sheo Shankar Sinha	Religious Trusts
Baleshwar Ram	Tourism

Chief Secretary

S. J. Majumdar

HIGH COURT

<i>Chief Justice</i>	V. Ramaswami
<i>Puisne Judges</i>	K. Ahmed, S. C. Misra, R. K. Chowdhury, K. Sahai, U. N. Sinha, N. L. Untwalia, H. Mahapatra, Tarakeswar Nath, Anant Singh, S. P. Singh, Ramratna Singh, G. N. Prasad, S. P. Singh, A. B. N. Sinha, R. J. Bahadur
<i>Advocate-General</i>	Mahabir Prasad

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	B. N. Rohtagi
<i>Members</i>	Ekbāl Hussain, Jagat Nandan Sahay, Bhagwat Prasad

LEGISLATIVE ASSEMBLY

Speaker : Lakshmi Narayan Sudhansu *Deputy Speaker* : Satyendra Narayan Agrawal

Banka: Smt. Vindya Vasini Devi (Con.)

Parbhata : Suresh Chandra Mishra (Con.)

BUDGET OF THE GOVERNMENT OF BIHAR

(ON REVENUE ACCOUNT)

(in lakhs of rupees.)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	9,64.16	10,42.28	10,49.95
Estate Duty	40.00	39.95	40.00
Land Revenue (net)	9,75.19	10,50.10	11,22.35
State Excise Duties	6,13.70	6,31.55	6,75.00
Stamps	3,93.42	4,23.56	4,58.17
Forest	2,59.29	2,59.81	2,56.87
Registration	88.50	99.07	1,04.71
Taxes on Vehicles	15.05	20.00	22.10
Sales Tax	12,11.02	15,66.27	16,96.52
Other Taxes and Duties	2,02.65	2,56.23	3,86.59
Irrigation, Navigation, Embankment and Drainage Works (net)	1,99.54	1,62.29	2,17.89
Debt Services	3,83.51	4,47.10	4,51.20
Civil Administration	8,40.96	10,18.62	9,94.17
Public Works and Miscellaneous Public Improvements (net)	60.11	59.95	56.95
Miscellaneous (net)	1,14.45	1,22.54	1,27.59
Contributions and Miscellaneous Adjustments between Central and State Governments	24,15.56	25,35.83	30,15.64
Extraordinary	3.26	3.56	3.56
GRAND TOTAL—REVENUE RECEIPTS	87,85.37	97,43.71	1,06,79.26
REVENUE EXPENDITURE			
Direct Demands on the Revenue	6,25.92	6,63.04	6,34.74
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	2,22.53	2,38.29	2,32.89
Debt Services (net)	10,63.56	11,37.90	10,74.62
General Administration	3,16.50	3,24.33	3,19.76
Administration of Justice	1,20.90	1,27.69	1,30.00
Jails	1,41.17	1,40.83	1,44.41
Police	6,17.87	6,50.75	6,57.65
Scientific Departments	8.60	9.48	10.03
Education	15,69.35	15,76.65	17,69.21
Medical	4,50.58	4,53.21	5,22.95
Public Health	3,69.54	3,61.03	3,48.20
Agriculture	4,62.45	4,57.78	5,72.62
Animal Husbandry	1,73.15	1,64.30	1,99.35
Co-operation	4,00.67	4,04.40	1,15.25
Industries	2,70.05	3,00.05	2,56.87
Miscellaneous Departments	3,61.52	3,86.43	5,14.24
Public Works and Miscellaneous Public Improvements	2,93.94	2,90.67	3,31.55
Miscellaneous	4,82.87	5,03.13	4,92.56
Extraordinary, including Community Projects, NES, and Local Development Works	6,08.76	6,31.55	9.06.13
Electricity Schemes	(—)7.51	(—)4.51	(—)6.56
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	85,52.42	88,17.00	92,26.77
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(+)2,32.95	(+)9,26.71	(+)14,52.49

GUJARAT

Area : 72,245 sq. miles
Principal language : Gujarati

Population : 2,06,33,350 Capital : Ahmedabad

Governor : Mehdi Nawaz Jung

COUNCIL OF MINISTERS

Ministers

Balwantrai Gopalji Mehta

Hitendra Kanaiyalal Desai

Smt. Indumati Chimanlal

Vijay M. Trivedi

Utsavbhai S. Parikh

Mohanlal P. Vyas

Vajubhai Manilalshah

Portfolios

.. Chief Minister, General Administration, Planning, Finance, Industries and Electricity

.. Home, Information, Law, Sports and Cultural Activities, Accommodation Control, Government Printing and Stationery and Jails

.. Education, Social Welfare, Prohibition, Excise and Rehabilitation

.. Public Works, Ports and Civil Supplies,

.. Revenue, Agriculture, Forests and Fisheries

.. Health, Labour and Housing

.. Panchayats, Community Projects, Co-operation, Sarvodaya, Municipalities and Road Transport

Deputy Ministers

Bahadurbhai K. Patel

Maldeoji M. Odedra

Smt. Urmilaben P. Bhatt

Devendrabhai M. Desai

Madhavsingh F. Solanki

Bhanuprasad V. Pandya

Jayarambhai A. Patel

.. Public Works and Ports

.. Finance, Planning, Industries and Electricity

.. Health, Jails, Social Welfare and Civil Supplies

.. Community Projects, Panchayats, Sarvodaya, Transport and Municipalities

.. Revenue, Accommodation Control, Agriculture, Forests and Home

.. Education, Prohibition and Excise

.. Agriculture and Irrigation

Parliamentary Secretary

Karimji Rahemanji Chhipa

Chief Secretary

V. L. Gidwani

HIGH COURT

Chief Justice

Puisne Judges

Advocate-General

.. J. M. Shelat

.. N. M. Miabhoy, V. B. Raju, P. N. Bhagwati, A. R. Bakshi, B. J. Divan, N. K. Vakil, J. B. Mehta, M. V. Shah

.. J. M. Thakore

PUBLIC SERVICE COMMISSION

Chairman

Members

.. R. T. Leuva

.. R. S. Parikh, P. V. Divatia

LEGISLATIVE ASSEMBLY

Speaker : Fatehali H. Palejwala

Deputy Speaker : Premjit T. Leuva

Amreli : Narbhashankar Nanji Paneri (PSP)

Chikhli : Gulabbhai Bhalubhai Patel (Con.)

BUDGET OF THE GOVERNMENT OF GUJARAT

ON REVENUE ACCOUNT

In Lakhs of Rupees

	Budget Estimates 1963-64	Revenue Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	4,68.20	5,75.90	5,17.63
Estate Duty	18.00	18.00	21.00
Land Revenue (net)	5,41.11	6,03.56	6,18.48
State Excise Duties	33.62	34.79	36.75
Stamps	2,20.83	2,71.76	2,90.24
Forest	1,61.00	1,64.50	1,80.12
Registration	15.76	16.31	17.92
Taxes on Vehicles	2,45.00	3,13.00	3,22.90
Sales Tax	15,00.00	18,95.00	19,54.00
Other Taxes and Duties	5,71.06	6,75.06	7,37.26
Irrigation, Navigation, Embankment and Drainage Works (net)	1,01.00	64.35	83.92
Debt Services	6,16.67	6,64.89	7,12.98
Civil Administration	4,80.19	4,86.00	5,31.97
Public Works and Miscellaneous Public Improvements (net)	60.72	64.70	76.60
Miscellaneous (net)	2,08.98	2,63.91	2,46.36
Contributions and Miscellaneous Adjustments between Central and State Governments	22,11.33	22,78.98	24,65.25
Extraordinary	5,85.74	5,85.74	5,61.44
GRAND TOTAL—REVENUE RECEIPTS	80,39.21	89,76.45	94,14.92
REVENUE EXPENDITURE			
Direct Demands on the Revenue	4,72.20	4,88.25	5,53.59
Revenue Account of Irrigation, Navigation Embankment and Drainage Works	4,82.05	5,09.25	5,68.44
Debt Services (net)	14,57.26	17,48.62	16,90.50
General Administration	3,53.54	3,55.03	2,80.45
Administration of Justice	1,00.14	98.99	1,02.84
Jails	28.50	29.08	29.68
Police	5,68.46	6,08.29	5,99.08
Ports and Pilotage	1,07.03	1,25.65	1,27.67
Dangs District	84.60	82.97	83.40
Scientific Departments	5.82	7.22	6.38
Education	13,08.85	14,71.42	14,93.75
Medical	2,97.48	2,74.70	3,10.32
Public Health	2,32.75	2,25.40	2,98.56
Agriculture and Rural Development	3,17.60	2,63.88	3,61.96
Animal Husbandry	62.25	54.82	73.26
Co-operation	87.31	84.69	1,01.53
Industries and Supplies	1,14.73	1,00.34	1,44.54
Miscellaneous Departments	2,23.45	2,48.53	3,00.78
Public Works and Miscellaneous Public Improvements	3,00.18	2,45.68	2,59.96
Miscellaneous	10,46.14	11,10.37	10,77.82
Extraordinary, including Community Projects NES, and Local Development Works	2,55.82	2,60.37	3,73.31
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	79,06.16	83,93.55	88,37.82
SURPLUS (+) DEFICIT(—) ON REVENUE ACCOUNT	(+)1,33.05	(+)5,82.90	(+)5,77.10

JAMMU AND KASHMIR

Area : 86,023 sq. miles *Population*: 3,560,976 *Capital* : Srinagar
Principal languages : Kashmiri, Dogri, Urdu

Sadar-i-Riyasat : Karan Singh

COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
G.M. Sadiq	Prime Minister, General Administration, Cabinet Work, Civil Secretariat, Education, National Cadet Corps, Planning, Information, Publicity, Law, Ladakh Affairs, Trade Agencies and Franchise and Legislation
Mir Qasim	Revenue, Evacuee Property, Relief and Rehabilitation, Food and Agriculture, Land Revenue, Supplies and Price Control, Forests, Social Welfare and Community Development
D.P. Dhar	Home, Law and Order, Militia, Police, Transport, Road Building, Housing, Tourism, Public Works, Central Stores and Purchases
Trilochan Dutta	Finance, Health, Industries, Municipalities and Excise and Taxation

Chief Secretary
E. N. Mangat Rai

HIGH COURT

<i>Chief Justice</i>	J. N. Wazir
<i>Puisne Judges</i>	M. Fazl Ali, J. N. Bhaab
<i>Advocate-General</i>	Jaswant Singh

LEGISLATIVE ASSEMBLY

Speaker : G. M. Mir Rajpuri *Deputy Speaker*: Hemraj Janjial

No change

LEGISLATIVE COUNCIL

Chairman : S. N. Fotedar *Deputy Chairman*: Ghayas-ud-Din

BUDGET OF THE GOVERNMENT OF JAMMU AND KASHMIR

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	72.57	83.47	81.80
Estate Duty	3.05	3.05	3.05
Land Revenue (net)	70.20	76.38	80.28
State Excise Duties	65.02	59.02	60.02
Stamps	15.00	16.51	16.81
Forest	5,00.00	4,75.00	5,00.00
Registration	6.23	5.27	5.77
Taxes on Vehicles	15.50	21.00	23.00
Sales Tax	35.10	62.00	69.00
Other Taxes and Duties	11.00	26.10	35.10
Irrigation, Navigation, Embankment and Drainage Works (net)	1,15.00	1,03.06	1,23.89
Debt Services	64.29	41.52	13.84
Civil Administration	3,20.63	1,84.53	59.52
Public Work and Miscellaneous Public Improvements (net)	2,04.52	2,08.87	2,15.24
Miscellaneous (net)	2,67.13	2,69.21	2,95.38
Contributions and Miscellaneous Adjustments between Central and State Governments	6,85.22	7,92.11	7,25.26
Extraordinary	1,02.00	2.00	77.00
GRAND TOTAL—REVENUE RECEIPTS	25,52.46	24,29.10	23,84.96
REVENUE EXPENDITURE			
Direct Demands on the Revenue	1,55.00	1,57.38	1,99.39
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	82.98	1,06.47	1,05.11
Debt Services (net)	3,16.67	2,21.16	3,22.47
General Administration	61.56	61.88	65.96
Administration of Justice	15.25	15.08	16.02
Jails	7.04	6.85	7.36
Police	1,11.22	1,35.20	1,67.10
Scientific Departments	0.49	0.47	0.86
Education	3,04.02	3,03.25	3,64.42
Medical	1,22.96	1,19.99	1,62.62
Public Health	39.96	37.46	59.57
Agriculture	65.35	59.24	75.76
Animal Husbandry	62.54	54.55	43.81
Co-operation	20.24	17.86	27.59
Industries and Supplies	2,57.93	1,46.70	55.16
Miscellaneous Departments	68.40	60.38	90.90
Public Works and Miscellaneous Public Improvements	1,01.48	1,75.03	1,07.97
Miscellaneous	4,42.65	5,60.21	5,46.40
Extraordinary, including Community Projects, NES, and Local Development Works	79.98	78.43	85.81
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	23,15.72	23,17.59	25,04.28
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(+)2,36.74	(+)1,11.51	(—)1,19.32

KERALA

Area: 15,002 sq. miles
Principal language: Malayalam

Population: 1,69,03,715

Capital: Trivandrum

Governor: V.V. Giri

COUNCIL OF MINISTERS

<i>Ministers</i>				<i>Portfolios</i>
R. Shankar	..	..	..	Chief Minister, General Administration, Planning, Education, Information and Publicity, Stationery and Printing, Museums, Zoo and Archaeology and Home, Police, Anti-corruption and Administration of Civil and Criminal Justice
T. A. Thomman	..	..	..	Law and Legislation, Land Revenue, Jails, Elections, Agricultural Income Tax and Commercial Taxes
K. A. Damodara Menon	..	..	..	Finance, Industries, Commerce, Panchayats, Mining and Geology, Cement, Iron and Steel, Stores Purchase and Insurance
P. P. Ummer Koya	..	..	..	Public Works, Tourism, Sports and Electricity
K. T. Achuthan	..	..	..	Transport, Labour, Excise and Prohibition
E. P. Poulose	..	..	..	Food and Agriculture and Animal Husbandry, Irrigation, Civil Supplies, Co-operation, Dairying, Social Welfare and Community Development
K. Kunhambu	..	..	..	Harijan Uplift, Registration, Housing and Fisheries
M. P. Govindan Nair	..	..	..	City Improvement Trust, Municipalities, Health, Ayurveda, Forests, Devaswams and Charitable Institutions.

Chief Secretary

N. M. Patnaik

HIGH COURT

<i>Chief Justice</i> ..	..	..	..	..	M. S. Menon.
<i>Puisne Judges</i> ..	..	..	..	..	T. K. Joseph, P. T. Raman Nayar, C. A. Vaidialingam, S. Velu Pillai, Smt. Anna Chandy, P. Govinda Menon, T. C. Raghavan, M. Madhavan Nair, P. Govindan Nair, K. K. Mathew

PUBLIC SERVICE COMMISSION

<i>Chairman</i> ..	..	..	..	..	V. Mariyartham
<i>Members</i> ..	..	..	..	..	P. T. Bhaskara Panicker, C. O. T. Kunhi Pakki A. P. Udayabhanu

LEGISLATIVE ASSEMBLY

Speaker: Alexander Parambithara

Deputy Speaker: Smt. Nafeesath Beebi

No change

BUDGET OF THE GOVERNMENT OF KERALA

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	5,72.72	6,58.45	6,09.43
Estate Duty	16.34	18.42	18.56
Land Revenue (net)	1,96.89	60.02	1,29.01
State Excise Duties	3,68.00	3,96.00	4,05.00
Stamps	2,58.54	2,54.35	2,61.26
Forest	5,00.00	4,80.00	5,00.00
Registration	52.00	53.40	53.75
Taxes on Vehicles	3,00.00	3,80.00	3,90.00
Sales Tax	13,37.00	15,62.00	16,62.00
Other Taxes and Duties	31.80	1,19.84	1,81.00
Irrigation, Navigation, Embankment and Drainage Works (net)	28.51	33.88	35.26
Debt Services	3,42.65	3,29.15	2,93.73
Civil Administration	6,78.35	6,07.14	5,96.97
Public Works and Miscellaneous Public Improvements (net)	50.70	30.88	31.22
Miscellaneous (net)	5,90.40	6,45.59	6,85.39
Contributions and Miscellaneous Adjustments between Central and State Governments	18,41.00	18,85.32	21,04.71
Extraordinary	2.10	1.69	1.03
GRAND TOTAL—REVENUE RECEIPTS	71,67.00	75,16.13	79,58.32
REVENUE EXPENDITURE			
Direct Demands on the Revenue	3,69.32	3,46.25	3,71.27
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	1,49.29	1,67.61	1,55.96
Debt Services (net)	5,61.29	5,63.08	6,40.61
General Administration	1,79.63	1,81.50	1,66.96
Administration of Justice	1,05.30	1,06.26	1,10.76
Jails	41.60	45.85	47.20
Police	3,32.80	2,99.61	3,42.28
Ports and Pilotage	7.32	6.75	6.35
Scientific Departments	8.87	8.34	8.94
Education	22,29.16	21,55.60	23,67.68
Medical		4,23.32	5,20.33
Public Health	2,45.77	2,28.37	2,38.62
Agriculture and Rural Development	2,68.27	2,61.06	3,54.96
Animal Husbandry	48.53	50.30	71.24
Co-operation	48.43	37.20	50.37
Industries and Supplies	3,06.33	2,77.17	1,18.90
Miscellaneous Departments	2,28.76	2,21.21	3,05.74
Public Works and Miscellaneous Public Improvements	8,60.70	9,58.84	10,15.98
Miscellaneous	4,25.67	4,35.48	4,42.66
Extraordinary, including Community Projects, NES, and Local Development Works	2,31.98	2,30.30	2,63.74
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	70,86.78	70,04.10	75,99.74
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(+) 80.22	(+) 5,12.03	(+) 3,58.58

MADHYA PRADESH

Area : 1,71,217 sq. miles
Principal language : Hindi

Population : 3,23,72,408

Capital : Bhopal

Governor : H. V. Pataskar
COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
Dwarka Prasad Mishra	Chief Minister, General Administration, Home, Publicity and Rehabilitation
Shambhunath Shukla	Finance
Shankar Dayal Sharma	Education and Languages
Mishrilal Gangwal	Planning and Development and Economics and Statistics
Nares Chandra Singh	Tribal Welfare
Ganeshram Anant	Co-operation
Smt. Padmavati Devi	Social Welfare
Narsingh Rao Dikshit	Commerce and Industry and Natural Resources
Govind Narain Singh	Local Government (Urban and Rural)
Gulsher Ahmed	Law, Separate Revenue and Registration
Gautam Sharma	Food and Civil Supplies

Ministers of State

Sajjan Singh Vishnar	Electricity
Vasant Rao Wickey	Forests and Home
Rama Charan Rai	Public Health
Arjun Singh	Agriculture and General Administration
Kunj Biharilal Guru	Revenue, Land Records, Land Reforms, Survey and Settlement
Parmanand Bhai Patel	Public Works (Bridges and roads)
Rameshwar Prasad Sharma	Public Works (Irrigation)
Vedram	Jails
Shyam Sundar Patidar	Labour and Housing

Chief Secretary

R. P. Noronha

HIGH COURT

<i>Chief Justice</i>	P. V. Dixit
<i>Puisne Judges</i>	T. P. Naik, Abdul Hakim Khan, V. P. Newaskar, P. K. Tare, H. R. Krishnan, K. L. Pande, S. P. Srivastava, S. B. Sen, P. R. Sharma, N. M. Golwalkar, S. P. Bhargava
<i>Advocate-General</i>	M. Adhikari

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	K. Radhakrishnan
<i>Members</i>	Lal Pradyumn Singh, R. C. Murab, Manohar Singh Mehta

LEGISLATIVE ASSEMBLY

Speaker : Kunjilal Dube

Deputy Speaker : N. P. Shrivastava

Bina : Shyam Sunder Narain Mushran (Con.)

Morena : Hari Ram Singh (Con.)

Parasia : Sewak Ram Dubey (Con.)

Sitamau : Kishore Singh (JS)

Sonkatch : Vacant.

BUDGET OF THE GOVERNMENT OF MADHYA PRADESH

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Budget Estimates 1963-64	Revised Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	6,27.86	7,78.66	6,94.14
Estate Duty	28.52	28.52	28.52
Land Revenue (net)	12,09.95	10,15.29	10,56.87
State Excise Duties	6,31.00	6,41.00	7,31.00
Stamps	2,47.00	2,35.00	2,50.00
Forest	11,50.00	11,50.00	12,75.00
Registration	28.21	26.85	27.66
Taxes on Vehicles	2,60.20	2,40.00	3,00.00
Sales Tax	13,57.00	13,72.00	16,30.00
Other Taxes and Duties	5,29.00	4,72.60	5,72.70
Irrigation, Navigation, Embankment and Drainage Works (net)	1,08.44	1,19.35	1,55.83
Debt Services	6,73.46	12,18.53	6,12.81
Civil Administration	2,91.11	2,93.16	3,07.79
Public Works and Miscellaneous Public Improvements (net)	53.55	64.68	65.23
Miscellaneous (net)	97.28	1,33.04	195.54
Contributions and Miscellaneous Adjustments between Central and State Governments	21,85.56	25,39.17	28,69.83
GRAND TOTAL—REVENUE RECEIPTS ..	94,70.16	1,03,07.85	1,07,72.97
REVENUE EXPENDITURE			
Direct Demands on the Revenue	8,69.53	8,18.28	9,39.97
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	85.87	94.15	1,16.39
Debt Services (net)	10,21.54	13,39.60	11,46.05
General Administration	3,97.04	4,28.83	4,41.52
Administration of Justice	1,22.41	1,31.48	1,36.01
Jails	53.99	65.03	65.87
Police	7,24.50	7,54.11	7,87.37
Scientific Departments	14.28	12.19	20.59
Education	25,21.12	23,63.00	28,37.32
Medical	4,16.07	4,13.06	4,39.01
Public Health	3,74.80	3,69.49	4,27.88
Agriculture	3,35.69	4,08.39	4,72.37
Animal Husbandry	1,79.41	1,52.76	1,84.82
Co-operation	91.03	88.01	92.57
Industries and Supplies	1,55.24	1,23.39	1,47.86
Miscellaneous Departments	4,07.00	4,26.92	4,73.55
Public Works and Miscellaneous Public Improvements	6,26.52	6,28.60	6,82.43
Miscellaneous	5,56.07	5,68.62	6,61.23
Extraordinary, including Community Projects, NES, and Local Development Works	6,26.86	5,12.66	7,69.39
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	95,18.77	96,98.57	1,08,41.20
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(—) 48.61	(+) 6,09.28	(—) 68.23

MADRAS

Area : 50,331 sq. miles
Principal language : Tamil

Population : 3,36,86,953

Capital : Madra

Governor : Jaya Chamaraja Wadiyar

COUNCIL OF MINISTERS

Ministers	Portfolios
M. Bhaktavatsalam	Chief Minister, General Administration, Planning, Finance, Education, Labour, Legislature, Elections, Religious Endowments and Official Language
R. Venkataraman	Industries, Commercial Taxes, Nationalised Transport, Technical Education, Electricity, Housing, Handlooms, Yarn, Textiles, Mines and Minerals, Iron and Steel Control, Prices and Supply of Goods Act, Companies, Newsprint Control, Ex-Servicemen, Legislation on Chits, Law and Transport
P. Kakkan	Police, Agriculture, Minor Irrigation, Animal Husbandry, Harijan Welfare, Prohibition, Bhoodan and Gramdan
P. Ramajiah	Public Works, Revenue, Legislation on Money Lending, Legislation on Weights and Measures, Indian Overseas, Refugees and Evacuees, Passports and Ports
Smt. Jothi Venkatachalam ..	Public Health and Medicines, Women's and Children's Welfare, Orphanages, Accommodation Control, Beggars and Cinematograph Act
N. Nallasenapathi Sarkarai Man- radiar	Food, Co-operation, Courts, Forests and Cinchona, Khadi and Village Industries
G. Bhuvarahan	Information and Publicity, Registration, Stationery and Printing, Government Press, Prisons, Approved Schools and Vigilance Services and Fisheries
S. M. A. Majid	Municipal Administration, Community Development and Panchayats

Chief Secretary

S. K. Chettur

HIGH COURT

Chief Justice

S. Ramachandra Iyer

Puisne Judges

.. .. M. Anantanarayanan, K. Veeraswami, K. Sreenivasan, T. Venkatadri, P. Ramakrishna Ayyar, P. S. Kailasam, P. Kunhamed Kutti, R. Sadasivam, K. S. Venkataraman, K. S. Ramamurti, M. Natesan

Advocate-General

.. .. N. Krishnaswami Reddy

PUBLIC SERVICE COMMISSION

Chairman

.. .. J. Sivanandam

Members

.. .. S. Chinnappan, E. Adikesavan

LEGISLATIVE ASSEMBLY

Speaker : S. Chella Pandian

Deputy Speaker : K. Parthasarathi

Bodi Nayakamoor : Soundaraval Servai (Con.)

Tiruyannamalai : P. U. Shunmugham (DMK)

LEGISLATIVE COUNCIL

Chairman : M. A. Manickavelu
Naicker

Deputy Chairman : V. K. Palaniswamy
Gounder

R. Venkataraman	M. Ethirajulu
O. P. Ramaswami Reddiar	H. V. Hande
M. A. Manickavelu	K. K. Kothandaraman
M. A. Muthiah Chettiar	Smt. Lakshmi Krishnamurthi
A. Lakshmanaswami Mudaliar	Mohanlal Mehta
S. B. Adjityan	N. V. Natarajan
A. Chidambaram Mudaliar	V. K. Ramaswami Mudaliar
A. Chidambaranathan	M. Sankaralingam Pillai
C. P. Chitrarasu	Smt. Saraswathi Pandurangam
G. R. Damodaran	Sivasubramania Pandian
K. Doraiswamy Naidu	N. R. Thiagarajan

BUDGET OF THE GOVERNMENT OF MADRAS

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation			
Tax	9,36.00	10,88.00	9,96.00
Estate Duty	40.00	37.00	37.00
Land Revenue (net)	4,39.46	4,48.21	4,70.51
State Excise Duties	29.91	35.09	35.09
Stamps	6,90.67	6,29.58	6,44.41
Forest	2,42.66	2,37.34	2,29.90
Registration	1,46.02	1,40.30	1,40.22
Taxes on Vehicles	11,50.24	11,60.00	12,00.00
Sales Tax	25,76.41	27,75.00	30,05.00
Other Taxes and Duties	5,62.83	6,76.36	7,10.14
Irrigation, Navigation, Embankment and Drainage Works (net)	4,03.78	3,54.02	3,83.91
Debt Services	12,59.71	11,50.84	13,78.75
Civil Administration	9,52.79	10,82.85	10,36.38
Public Works and Miscellaneous Public Improvements (net)	94.09	1,24.93	1,38.96
Miscellaneous (net)	6,04.77	6,95.84	7,76.70
Contributions and Miscellaneous Adjustments between Central and State Governments	23,14.87	24,61.98	25,63.88
Works Extraordinary	0.88	0.77	1,00.72
GRAND TOTAL—REVENUE RECEIPTS	1,24,45.09	1,30,98.11	1,38,47.57
REVENUE EXPENDITURE			
Direct Demands on the Revenue	3,54.99	3,62.58	3,55.99
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	5,27.39	5,79.49	5,75.18
Debt Services (net)	11,44.87	12,53.97	14,61.19
General Administration	6,77.48	7,07.93	7,21.82
Administration of Justice	1,59.04	1,66.23	1,64.74
Jails	1,40.87	1,49.40	1,50.41
Police	7,26.09	7,48.62	7,26.89
Scientific Departments	6.20	6.80	7.16
Education	28,71.46	28,03.14	30,73.75
Medical	7,06.57	7,87.30	7,91.82
Public Health	2,69.22	2,48.42	2,80.43
Agriculture and Fisheries	5,72.89	5,86.88	6,45.58
Animal Husbandry	1,75.86	1,89.58	1,94.12
Co-operation	2,53.61	2,45.40	2,42.08
Industries and Supplies	5,65.75	5,93.88	6,47.31
Miscellaneous Departments	5,45.89	6,13.14	6,32.29
Civil Works and Miscellaneous Public Improvements	9,07.23	9,24.30	8,95.98
Miscellaneous	15,37.05	17,76.42	18,70.56
Extraordinary, including Community Projects, NES and Local Development Works	5,76.89	6,56.59	6,44.36
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	1,27,19.35	1,34,00.07	1,40,81.66
SURPLUS (+) DEFICIT(—) ON REVENUE ACCOUNT	(—)2,74.26	(—)3,01.96	(—)2,34.09

MAHARASHTRA

Area : 1,18,717 sq. miles *Population* : 3,95,53,718 *Capital* : Bombay
Principal language : Marathi

Governor : Smt. Vijaya Lakshmi Pandit

COUNCIL OF MINISTERS

<i>Ministers</i>			<i>Portfolios</i>
V. P. Naik	..	..	Chief Minister, General Administration, Revenue and Planning
D. S. Desai	..	..	Home
G. B. Khedkar	..	..	Rural Development
P. K. Savant	..	..	Agriculture
Shantlal Shah	..	..	Public Health, Law and Judiciary
S. K. Wankhede	..	..	Finance
S. B. Chavan	..	..	Irrigation, Power and Buildings and Communications
S. G. Barve	..	..	Industries and Electricity
Homi J. H. Taleyarkhan	..	..	Food, Civil Supplies, Housing, Printing Presses, Fisheries, Small Savings and Tourism
D. Z. Palaspar	..	..	Prohibition
Smt. Nirmala Raje Bhosale	..	..	Social Welfare
M. D. Choudhari	..	..	Education and Forests
K. S. Sonavane	..	..	Co-operation
N. M. Tidke	..	..	Labour
Rafiq Zakaria	..	..	Urban Development and Waqfs

Deputy Ministers

Gundu Dashrath Patil	..	..	Planning, Industries and Electricity
N. N. Kailas	..	..	Education
Yeshwantrao Jijaba Mohite	..	..	Agriculture
Madhusudan Atmeram Vairale	..	..	Irrigation and Power and Buildings and Communications
Rajaram Anant Patil	..	..	Revenue and Forests
Hari Govindrao Vartak	..	..	Public Health Khar Lands and Fisheries
Bhikaji Jijaba Khatal	..	..	Co-operation, Food and Civil Supplies
Kalyanrao Pandharinath Patil	..	..	Home and Labour
Dhondiram Shidaji Jagtap	..	..	Rural and Urban Development and Legislative Affairs
Digambar Narshi Padvi	..	..	Social Welfare and Housing

Chief Secretary

N. T. Mone

HIGH COURT

<i>Chief Justice</i>	..	..	..	H.K. Chainani
<i>Puisne Judges</i>	..	..	..	Y. S. Tambe, S. P. Kotwal, N. A. Mody, V. M. Tarkunde, D. V. Patel, V. S. Desai, K. K. Desai, V. A. Naik, N. L. Abhyankar, M. G. Chitale, Y. V. Chandrachud, D. G. Palekar, R. M. Kantawala, V. G. Wagle, H. R. Gokhale, L. M. Paranjpe, V. D. Tulzapurkar, H. D. Bal

Advocate-General J. M. Seervai

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	..	..	..	S. P. P. Thorat
<i>Members</i>	..	..	..	S. N. Mane, L. M. Patil, D. Y. Gohokar

LEGISLATIVE ASSEMBLY

Speaker : T. S. Bharde*Deputy Speaker* : K. T. Girme*Ambegaon* : V. A. Awate (Con.)*Khamgaon* : K. T. Ganpat (Ind.)*Bhagur* : Amrit Rao Tulsiram Kale (Con.)*Saoli* : G. W. Vistari (Con.)

LEGISLATIVE COUNCIL

Chairman : V. S. Page*Deputy Chairman* : N. N. Desai

Parekh Nathalal Manekchand	Legislative Assembly	Shirole Bhansaheb Laxanrao	Legislative Assembly
Thorat Sambhajirao Marutirao	"	Limaje Madhav Purushotham	Assembly
Ramachandrarao Chintamanrao	"	Baramukh Hari Chandra Sadashiv	Local Authorities
Kumbhare Ramachandra Balaji	"	Abad Laxmichand Ramchand	"
Jethmal Kisanlal	"	Shinde Sadashiv Anna-saheb	"
Pawar Viswanth Chimaji	"	Ramrao Danyangoba	"
Dhende Bhanrao Vithobaji	"	Jadhav Baburao	"
Ashtai Marcoti Appa ..	"	Aba Saheb	"
Gavai Ramakrisna Suryabhan	"		

BUDGET OF THE GOVERNMENT OF MAHARASHTRA

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	14,21.75	15,66.30	14,67.24
Estate Duty	35.00	36.00	36.00
Land Revenue (net)	6,98.02	7,82.38	7,34.00
State Excise Duties	1,41.00	1,49.71	1,53.34
Stamps	6,57.00	7,17.82	7,51.26
Forest	6,14.54	6,66.75	6,60.22
Registration	50.00	55.94	56.02
Taxes on Vehicles	6,52.00	6,47.73	6,50.16
Sales Tax	40,23.37	53,01.46	55,55.52
Other Taxes and Duties	17,83.11	19,95.30	21,27.87
Irrigation, Navigation, Embankment and Drainage Works (net)	1,86.25	2,37.98	2,23.92
Debt Services	10,12.00	9,34.60	10,36.66
Civil Administration	10,31.26	10,85.20	11,30.68
Public Works and Miscellaneous Public Improvements (net)	92.15	97.15	88.85
Miscellaneous (net)	2,56.67	2,53.85	4,10.53
Contributions and Miscellaneous Adjustments between Central and State Governments	30,69.34	26,66.08	34,93.94
Electricity Schemes	2,46.20	2,26.00	2,69.05
Extraordinary	0.97	0.57	—
GRAND TOTAL—REVENUE RECEIPTS ..	1,59,70.63	1,74,20.82	1,88,45.26
REVENUE EXPENDITURE			
Direct Demands on the Revenue	16,22.08	17,77.94	18,11.10
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	4,58.36	4,96.78	6,69.27
Debt Services (net)	19,72.82	20,22.51	22,23.21
General Administration	8,12.31	8,83.85	9,53.33
Administration of Justice	2,41.05	2,32.20	2,46.25
Jails	1,18.11	1,29.67	1,27.22
Police	12,58.41	14,40.45	13,87.35
Ports and Pilotage	36.73	45.90	60.69
Scientific Departments	24.32	21.16	45.93
Education	23,99.00	28,77.32	31,92.72
Medical	9,05.11	9,07.31	9,52.45
Public Health	3,59.87	3,21.81	4,60.78
Agriculture and Rural Development	6,78.87	6,04.58	7,10.82
Animal Husbandry	1,25.85	93.08	1,00.82
Co-operation	2,84.74	2,60.27	3,23.97
Industries and Supplies	1,94.51	1,81.16	1,85.45
Miscellaneous Departments	6,18.90	7,30.64	8,15.04
Electricity Schemes, Public Works and Miscellaneous	20.28	29.39	20.62
Works and Miscellaneous Public Improvements	6,69.44	6,89.53	8,57.87
Miscellaneous	24,48.95	23,94.44	27,75.23
Extraordinary, including Community Projects, NES and Local Development Works	7,96.81	7,37.83	8,74.13
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	1,60,46.53	1,68,77.82	1,87,94.25
SURPLUS (+)DEFICIT(—) ON REVENUE ACCOUNT	(—) 75.90	(+) 5,43.00	(+) 51.01

MYSORE

Area : 74,220 sq. miles
Principal language : Kannada

Population : 2,35,86,772

Capital : Bangalore

Governor : S. M. Srinagesh

COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
S. Nijalingappa	Chief Minister, General Administration, Planning Power and Irrigation
S. R. Kanthi	Education
B. D. Jatti	Finance
M. V. Krishnappa	Revenue, Animal Husbandry, Veterinary and Milk Supply
M. V. Rama Rao	Law, Courts, Excise and Prohibition, Organisation and Methods
R. M. Patil	Home and Tourism
Smt. Yasodharamma Dasappa	Social Welfare
K. Mallappa	Commerce and Industries
K. Nagappa Alva	Public Health and Medical
Veerendra Patil	Public Works and Electricity
B. Rachiah	Forests, Fisheries and Sericulture
Ramakrishna Hegde	Co-operation, Development and Rural Local Administration
D. Devaraj Urs	Labour, Housing and Road Transport Corporation
K. Puttaswamy	Municipal Administration
G. Narayana Gowda	Agriculture and Food Production

Deputy Ministers

Addul Gaffar	Finance
Maqsood Ali Khan	Mines and Geology
Smt. Grace Tucker	Education
Y. Ramachandra	Municipal Administration
K. Prabhakar	Social Welfare
Mallikarjunaswamy	Planning
Kondaji Basappa	Co-operation
Alur Hanumanthappa	Minor Irrigation
R. Dayanand Sagar	Sericulture

Parliamentary Secretaries

G. B. Shankar Rao	Public Works
H. C. Boraiah	Agriculture

Chief Secretary

K. Balachandran

HIGH COURT

<i>Chief Justice</i>	H. Hombe Gowda
<i> Puisne Judges</i>	A. R. Somnath Iyer, M. Sadasivayya, K. S. Hegde, A. Narayan Pai, Ahmed Ali Khan, B. M. Kalagate, G. K. Govind Bhatt, T. K. Tukol, K. R. Gopivallabh Iyengar, D. M. Chandrasekhar
<i>Advocate-General</i>	S. Krishna Rao

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	R. Chennigaramiah
<i>Members</i>	Nanjaraaja Urs, K. R. Marudevegowda, S. A. L. Razvi, S. D. Kothavale

LEGISLATIVE ASSEMBLY

Speaker : B. Valkunta Baliga *Deputy Speaker :* A. R. Panchagavi

Bijapur : Sharanayya Vastrad (Con.)

Dharwar : S. V. Agnihotri (Con.)

Turuvekere : B. Byrappa (PSP)

LEGISLATIVE COUNCIL

Chairman : G. V. Hanikeri

Deputy Chairman : Smt. M. R. Lakshamma

S. C. Kubasad	Legislative Assembly	M. T. Sreekanthiah ..	Legislative Assembly
M. Madaiah	"	D. Raja Gopal ..	"
K. Kanthappa Setty ..	"	Jitraj Hirachand ..	"
		S. S. Narayana Murthy	"

BUDGET OF THE GOVERNMENT OF MYSORE

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	5,85.98	6,64.41	6,25.53
Estate Duty	22.00	22.88	23.27
Land Revenue (net)	7,21.90	7,87.66	7,82.73
State Excise Duties	2,94.39	3,39.97	3,48.65
Stamps	2,80.00	3,25.00	3,32.00
Forest	8,84.50	9,00.88	9,18.52
Registration	39.00	47.75	49.98
Taxes on Vehicles	6,50.00	6,75.00	5,70.00
Sales Tax	12,25.97	13,75.00	14,71.00
Other Taxes and Duties	3,36.00	3,54.57	5,43.76
Irrigation, Navigation, Embankment and Drainage Works (net)	51.16	62.66	61.25
Debt Services	6,82.04	7,73.93	7,30.71
Civil Administration	14,80.41	14,44.01	16,89.80
Public Works and Miscellaneous Public Improvements (net)	65.73	1,07.39	95.8
Miscellaneous (net)	1,68.38	1,43.64	1,55.57
Contributions and Miscellaneous Adjustments between Central and State Governments	24,24.03	23,61.34	27,07.43
GRAND TOTAL—REVENUE RECEIPTS ..	99,11.52	1,03,86.09	1,11,06.03
REVENUE EXPENDITURE			
Direct Demands on the Revenue	7,26.66	7,64.05	8,60.36
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	4,36.96	5,77.74	5,14.42
Debt Services (net)	11,01.20	11,54.93	12,53.57
General Administration	2,82.10	2,97.00	2,99.00
Administration of Justice	1,05.79	1,07.42	1,10.69
Jails	43.66	45.98	44.85
Police	4,49.62	4,50.30	4,95.47
Ports and Pilotage	3.90	4.26	6.02
Scientific Department	16.17	13.89	16.97
Education	18,75.75	18,70.44	21,91.50
Medical	3,53.27	3,49.56	3,81.91
Public Health	3,34.04	3,00.00	3,49.35
Agriculture and Rural Development	2,72.74	3,37.89	3,80.51
Animal Husbandry	1,43.37	1,57.70	2,14.91
Co-operation	75.91	77.87	71.56
Industries and Supplies	9,16.72	9,90.93	10,91.03
Miscellaneous Departments	3,25.39	3,16.65	3,27.55
Public Works and Miscellaneous Public Improvements	12,08.13	11,39.15	12,54.19
Miscellaneous	8,20.45	8,94.10	8,79.62
Extraordinary, including Community Projects, NES, and Local Development Works	3,09.82	3,15.49	3,55.54
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	98,01.65	1,01,65.35	1,10,99.02
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(+)1,09.87	(—)2,20.74	(—)7.01

NAGALAND

Area : 6,366 sq. miles

Population : 3,69,200

Capital : Kohima

Under the Nagaland (Transitional Provisions) Regulation, 1961, promulgated by the President on February 8, 1961, the areas comprised in Naga Hills-Tuensang Area came to be known as Nagaland, and to have the status of a separate State of the Indian Union. Parliament passed the State of Nagaland Act and the Constitution (Thirteenth Amendment) Act, 1962, in this connection.

On December 1, 1963 the President formally declared Nagaland a State on par with the other States of the country, enjoying full representative government. General elections were thereafter held in the new State and the Ministry was sworn in on January 25, 1964.

Governor : Vishnu Sahay

COUNCIL OF MINISTERS

Ministers

Portfolios

P. Shilu Ao	..	..	..	..	..	Chief Minister, Home, Appointments, Confidential Department, Secretariat Administration, Political and Election, Planning and Coordination, Councils and Revenue
Hokishe Sema	..	..	..	..	..	Finance, P.W.D. of Roads and Buildings including army constructions
Jasokie	..	..	..	..	..	Supply and Transport, Forests and Relief and Rehabilitation
R. C. Chiten Jamir	..	..	..	..	..	Agriculture, Veterinary and Animal Husbandry, Registration and Co-operation, Fisheries, Industries and Commerce, Law and Parliamentary Affairs
Akum Imlong	..	..	..	..	..	Tuensang Affairs, Publicity and Information
Hordamo Kithan	..	..	..	..	..	Education, Town Planning and Town Committees
Luthipru Vasa	..	..	..	..	..	Medical and Public Health, Community Development, Excise and Jails

Deputy Minister

N. L. Odyug	Tribal Area and Range Councils, Co-ordination, Electricity, and any other works allotted to him by the Chief Minister
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Parliamentary Secretary

Kezhe Sema

Chief Secretary

U. Sharma

LEGISLATIVE ASSEMBLY

Speaker : T. N. Angami

Deputy Speaker : K. Shikhu

1. Aghunato	..	..	..	..	..	Shezhe Sema (NNO)*
2. Akuluto	..	..	..	..	..	Hokishesemi (NNO)
3. Alongtaki	..	..	..	..	..	Zulutenha Ao (NNO)
4. Angami Northern (1)	..	..	..	..	..	Neitue Angami (DPN)**
5. Angami Northern (2)	..	..	..	..	..	Lhousohie (DPN)
6. Angami Southern (1)	..	..	..	..	..	Ngurohie Zeo (DPN)
7. Angami Southern (2)	..	..	..	..	..	Vizol (DPN)
8. Angami Western	..	..	..	..	..	T. N. Angami (Speaker)
9. Arkakong	..	..	..	..	..	R. C. Chiten Jamir (NNO)

*NNO : Nagaland Nationalist Organisation.

**DPN : Democratic Party of Nagaland.

LEGISLATIVE ASSEMBLY (*concl'd.*)

10.	<i>Atoizu</i>	..	..	..	..	Kuyekhu Shikhu (NNO)
11.	<i>Aunglenden</i>	..	..	..	..	Imsumeren (DPN)
12.	<i>Bhandari</i>	..	..	..	..	Tsenlamo Kikon (NNO)
13.	<i>Chazouba (1)</i>	..	..	..	..	Pudemu (NNO)
14.	<i>Chazouba (2)</i>	..	..	..	..	Netsutso (NNO)
15.	<i>Chizami</i>	..	..	..	..	Lhusetso (NNO)
16.	<i>Dimapur</i>	..	..	..	..	Deba Lal Mech (NNO)
17.	<i>Dinapur Town</i>	..	..	..	..	Govinda Chandra Paira (NNO)
18.	<i>Ghaspani</i>	..	..	..	..	Langkam Kaki (NNO)
19.	<i>Impur</i>	..	..	..	..	P. O. Shilu Ao (NNO)
20.	<i>Jangpekong</i>	..	..	..	..	R. Lisen (DPN)
21.	<i>Kohima Town</i>	..	..	..	..	Jasokie (NNO)
22.	<i>Koridang</i>	..	..	..	..	Tajen Ao (DPN)
23.	<i>Meluri</i>	..	..	..	..	Amon (NNO)
24.	<i>Mailanwozhuro</i>	..	..	..	..	Ovung Nsemo (DPN)
25.	<i>Mokokchung Town</i>	..	..	..	..	Khelhoshe Sema (NNO)
26.	<i>Mongoya</i>	..	..	..	..	Bendangangshi (DPN)
27.	<i>Paran</i>	..	..	..	..	Longbe (DPN)
28.	<i>Pfaghoboto</i>	..	..	..	..	Wezhutie (NNO)
29.	<i>Phek</i>	..	..	..	..	Luthipru (NNO)
30.	<i>Pughoboto</i>	..	..	..	..	Kiyelho (NNO)
31.	<i>Sanis</i>	..	..	..	..	Kithan Mhondamo (NNO)
32.	<i>Satakha</i>	..	..	..	..	Yeshito (NNO)
33.	<i>Surohoto</i>	..	..	..	..	Nihovi Ayemi (NNO)
34.	<i>Tening</i>	..	..	..	..	Lalholam (Ind.)
35.	<i>Tseminyu</i>	..	..	..	..	Rigathong Viyekha (DPN)
36.	<i>Tuensang Regional Council</i>	..	..	..	..	Akum Imlong (NNO)
						Kilongba (NNO)
						Lipiki (NNO)
						Litingse (NNO)
						Sangnya (NNO)
						Tochi Hanso (NNO)
37.	<i>Tuli</i>	..	..	..	..	Kajankaba (DPN)
38.	<i>Tyui-Longchum Wokha</i>	..	..	..	..	Ngrllie Trauthungo (Ind.)
39.	<i>Wokha</i>	..	..	..	..	N. L. Odyuo (NNO)
40.	<i>Yisemyong</i>	..	..	..	..	Suzumar Imsong (NNO)
41.	<i>Zhunheboto</i>	..	..	..	..	Kihoto (NNO)

BUDGET OF THE GOVERNMENT OF NAGALAND

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget* Estimates 1964-65
REVENUE RECEIPTS			
Land Revenue (net)	0.70	0.70	0.64
State Excise Duties	0.90	0.71	1.25
Stamps	0.85	0.35	1.15
Forest	4.50	4.26	10.00
Registration	—	—	0.25
Taxes on Vehicles	1.20	1.46	1.65
Sales Tax	0.12	0.22	0.35
Other Taxes and Duties	0.20	0.65	0.30
Irrigation, Navigation, Embankment and Drainage Works (net)			
Debt Services	—	0.01	0.02
Public Administration	2.48	5.78	2.95
Electricity Schemes	0.95	1.51	4.00
Miscellaneous (net)	3.50	3.15	2.44
Contributions and Miscellaneous Adjustments between Central and State Governments ..	—	3,00.00	8,76.00
GRAND TOTAL—REVENUE RECEIPTS ..	15.40	3,18.80	9,01.00
REVENUE EXPENDITURE			
Direct Demands on the Revenue	25.90	24.48	20.23
General Administration	92.50	97.10	1,20.00
Administration of Justice	0.33	0.38	0.25
Jails	4.46	4.49	2.90
Police	2,50.00	2,67.53	3,97.00
Scientific Departments			
Education	70.00	80.08	75.00
Medical	32.50	30.99	36.00
Public Health	10.00	8.10	9.44
Agriculture	21.71	28.27	23.00
Animal Husbandry	7.69	10.69	9.00
Co-operation	1.70	1.52	1.40
Industries	3.60	3.50	3.45
Miscellaneous Departments	8.99	16.01	16.15
Irrigation and Electricity Schemes	10.00	11.04	8.00
Public Works and Miscellaneous Public Improvements	—	82.09	1,16.61
Miscellaneous	37.85	40.22	36.57
Extraordinary including Community Projects, NES and Local Development Works ..	28.10	32.93	26.00
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	6,05.33	7,39.42	9,01.00

*Based on the Revised Estimate for the first 8 months as given in Demands for Grants of the Ministry of External Affairs and remaining 4 months as given in the Budget Estimate of the Government of Nagaland.

ORISSA

Area : 60,171 sq. miles
Principal language : Oriya

Population : 1,75,48,846

Capital : Bhubaneswar

Governor : A. N. Khosla

COUNCIL OF MINISTERS

<i>Ministers</i>	<i>Portfolios</i>
Biren Mitra	Chief Minister, Finance, Industries, Mining and Geology, Irrigation and Power, Cultural Affairs, Health (Local Self-Government), Planning and Coordination and Commerce
Sadasiba Tripathy	Revenue, Excise and Co-operation and Forestry
Nilamani Routray	Home, Political and Services, Labour and Supply
P. V. Jagannatha Rao	Health (excluding Local Self-Government)
Harihar Singh Mardaraj	Works and Transport
Brindaban Nayak	Community Development and Parchayati Raj
Satya Priya Mohanty	Education, Agriculture and Animal Husbandry and Co-operation
T. Sanganna	Tribal and Rural Welfare
Banamali Babu	Law

Deputy Ministers

Prahalad Mallick	Irrigation and Power
Bir Bikramaditya Singh Bariha	Transport and Animal Husbandry
Smt. Saraswati Pradhan	Education
Chandra Mohan Singh	Labour and Home (Jails)
Santoshkumar Sahu	Co-operation, Cultural Affairs and Local Self-Government

Chief Secretary

B. Sivaraman

HIGH COURT

<i>Chief Justice</i>	B. L. Narasimham
<i>Puisne Judges</i>	S. B. Barman, R. K. Das, G. K. Misra
<i>Advocate-General</i>	D. Sahu

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	G. B. Misra
<i>Members</i>	M. L. Pandit, B. O. Das

LEGISLATIVE ASSEMBLY

Speaker : Lingaraj Panigrahi

Deputy Speaker : Lokanath Misra

No change

BUDGET OF THE GOVERNMENT OF ORISSA

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	3,39.85	4,14.55	3,76.87
Estate Duty	15.03	15.04	15.05
Land Revenue (net)	3,03.28	3,06.87	3,12.21
State Excise Duties	1,98.37	1,98.22	2,01.02
Stamps	1,17.10	1,08.23	1,11.06
Forest	4,17.83	4,01.21	4,10.56
Registration	29.50	31.25	32.25
Taxes on Vehicles	1,41.90	1,46.60	1,62.35
Sales Tax	5,66.62	6,71.11	7,22.60
Other Taxes and Duties	1,01.01	1,05.71	1,07.25
Irrigation, Navigation, Embankment and Drainage Works (net)	81.96	69.12	89.47
Debt Services	6,43.15	6,42.08	7,27.06
Civil Administration	232.68	2,83.23	2,72.06
Civil Works and Miscellaneous Public Improvements (net)	33.72	38.68	40.41
Multi-purpose River Schemes	2,26.00	2,35.00	2,52.00
Electricity Schemes	69.01	85.51	72.51
Miscellaneous (net)	2,51.59	2,75.56	2,67.70
Contribution and Miscellaneous Adjustments between Central and State Governments	29,91.00	30,13.22	32,80.83
GRAND TOTAL—REVENUE RECEIPTS ..	67,59.60	70,41.19	74,53.26
REVENUE EXPENDITURE			
Direct Demands on the Revenue	4,20.62	3,96.27	4,46.51
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	1,05.09	1,09.92	1,34.39
Debt Services (net)	11,30.15	12,13.61	13,32.56
General Administration	2,63.34	3,11.19	2,77.24
Administration of Justice	43.60	43.66	45.77
Jails	33.69	36.15	38.31
Police	3,09.53	3,00.79	3,10.36
Ports and Pilotage	1.56	2.17	3.40
Scientific Departments	22.43	28.72	35.64
Education	7,70.42	8,36.09	9,23.36
Medical	2,36.19	2,44.05	2,78.00
Public Health	1,70.29	1,88.51	2,75.13
Agriculture and Rural Development	5,19.09	4,53.41	5,85.63
Animal Husbandry	1,06.33	1,14.19	1,31.43
Co-operation	50.99	51.67	63.45
Industries	1,81.20	1,47.96	2,37.01
Miscellaneous Departments	2,83.57	2,80.44	3,30.44
Public Works and Miscellaneous Public Improvements	10,73.89	11,99.79	12,20.41
Miscellaneous	4,91.18	5,78.83	5,39.53
Extraordinary, including Community Projects, NES and Local Development Works	5,01.72	5,63.81	6,36.20
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	67,14.88	71,01.23	78,44.77
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(+)44.72	(—)60.04	(—)3,91.51

PUNJAB

Area : 47,108 sq. miles *Population* : 2,03,06,812 *Capital* : Chandigarh
Principal languages : Punjabi and Hindi

Governor : Mohammad Ibrahim

COUNCIL OF MINISTERS*

<i>Ministers</i>	<i>Portfolios</i>
Ram Kishan	Chief Minister, General Administration, Public Relations, Cultural Affairs and Tourism, Political
Darbara Singh	Sufferers, Vigilance, Jails and Justice, Industries, Transport, Capital Project, Architecture, Town and Country Planning, Food and Civil Supplies
Prabodh Chandra	Home (including Integration), Elections, Community Development, Animal Husbandry, Dairying, Co-operation
Kapur Singh	Education, Health, Medical Education, Excise, Sports
Harinder Singh	Finance, Taxation, Planning, Statistics, Small Savings
Rizk Ram	Revenue, Consolidation of Holdings, Relief and Rehabilitation
	Irrigation and Power, PWD, Buildings and Roads, and Public Health Engineering, Housing and Slum Clearance, Forests, Game Preservation, Welfare, Labour, Stationery and Printing

Deputy Minister
 Sunder Singh Welfare, Labour, Printing and Stationery

Chief Parliamentary Secretary
 Gulab Singh Chief Minister and Irrigation and Power Minister

Chief Secretary
 Gyan Singh Kahlon
 HIGH COURT

Chief Justice D. Falshaw
Puisne Judges S. S. Dulat, Mehar Singh, S. B. Capoor, R. P. Khosla, A. N. Grover, I. D. Dua, Harbans Singh, D. K. Mahajan, J. S. Bedi, Shamsher Bahadur, P. C. Pandit, Gurdev Singh, P. D. Sharma, H. R. Khanna, Jindra Lal

Advocate-General Vacant

PUBLIC SERVICE COMMISSION

Chairman J. S. Basur
Members D. D. Kapila, Darbari Lal Gupta, Dalbir Singh, Mohan Singh

LEGISLATIVE ASSEMBLY

Speaker : Harbans Lal

Deputy Speaker : Smt. Shanno Devi

Patil : Umrao Singh (Con.)

LEGISLATIVE COUNCIL

Chairman : vacant

Deputy Chairman : Smt. Lekhwati Jain

1. Des Raj	Legislative Assembly	2. Shri Chand Goyal	Graduates
2. Nasib Singh	"	1. Gopal Krishan	Teachers
3. Puran Singh	"	1. Hans Raj	Local Authorities
4. Shyam Lal	"	2. Prem Singh	"
5. Sultan Singh	"	3. Chanan Singh	"
6. Teja Singh	"	4. Kundan Lal	"
1. Krishan Lal	Graduates	5. Sat Paul	"

*Following the resignation of the Punjab Ministry headed by Partap Singh Kairon, on June 15, 1964 a new Ministry with Ram Kishan as Chief Minister was sworn in on July 6, 1964. The personnel of the Punjab Council of Ministers given here is as on July 10, 1964.

BUDGET OF THE GOVERNMENT OF PUNJAB

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	4,39.80	5,31.61	4,86.22
Estate Duty	18.00	18.00	18.00
Land Revenue (net)	4,36.03	5,09.06	4,50.34
State Excise Duties	5,67.24	5,62.19	5,72.27
Stamps	5,06.50	5,59.81	5,61.83
Forest	1,10.61	1,35.44	1,31.26
Registration	40.50	40.20	41.90
Taxes on Vehicles	1,20.12	1,40.04	1,51.55
Sales Tax	10,83.97	14,09.49	14,66.91
Other Taxes and Duties	5,89.45	9,73.13	9,36.55
Irrigation, Navigation, Embankment and Drainage Works (net)	4,82.59	4,98.23	4,96.22
Debt Services	13,92.77	16,53.53	15,81.18
Civil Administration	5,68.81	6,32.85	5,86.45
Public Works and Miscellaneous Public Improvements (net)	92.24	1,00.38	1,01.58
Multi-purpose Schemes	3,17.11	3,31.82	3,37.87
Miscellaneous (net)	9,16.36	11,18.13	11,99.40
Contributions and Miscellaneous Adjustments between Central and State Governments	18,22.13	18,72.93	21,47.33
Community Development Projects, NES and Local Development Extraordinary	1.53	15.34	0.20
GRAND TOTAL—REVENUE RECEIPTS	95,10.76	1,11,02.81	1,12,67.30
REVENUE EXPENDITURE			
Direct Demands on the Revenue	5,06.58	4,82.55	5,49.45
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	6,00.29	5,86.37	6,20.79
Debt Services (net)	13,51.56	17,50.04	19,39.66
General Administration	3,68.82	3,32.64	3,98.79
Administration of Justice	73.87	73.19	76.00
Jails	72.01	79.18	81.20
Police	9,31.33	8,47.49	9,53.28
Scientific Departments	2.60	2.38	2.74
Education	15,03.29	15,46.80	16,83.59
Medical	3,80.46	3,80.28	4,48.38
Public Health	1,91.82	1,67.53	2,02.02
Agriculture	2,81.70	3,31.42	4,50.92
Animal Husbandry	1,36.33	1,25.79	1,57.74
Co-operation	98.83	91.05	1,26.93
Industries and Supplies	2,30.73	2,22.54	2,58.78
Miscellaneous Departments	3,69.24	3,01.94	3,13.05
Public Works and Miscellaneous Public Improvements	11,77.51	9,84.51	11,17.82
Miscellaneous	19,61.04	21,42.01	15,45.85
Extraordinary, including Community Projects, NES and Local Development Works	2,96.90	2,83.04	3,63.78
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	1,05,34.91	1,07,30.75	1,12,90.77
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	10,24.15	(+)3,71.43	(—)23.38

RAJASTHAN

Area : 1,31,943 sq. miles *Population* : 2,01,55,602 *Capital* : Jaipur
Principal languages : Rajasthani and Hindi

Governor : Sampurnanand

COUNCIL OF MINISTERS

<i>Ministers</i>				<i>Portfolios</i>
Mohanlal Sukhadia	..	..	..	Chief Minister, General Administration, Political Appointments, Home, Revenue including Famine Relief and Colonisation, Mines and Mineral based Industries
Haribhau Upadhyaya	..	..	..	Education, Transport, Devasthan, Khadi and Village Industries and Social Welfare
Mathura Das Mathur	..	..	..	Planning, Statistics, State Enterprises (Industrial and Mineral), Law, Judicial, Legislative Assembly and Elections and Publicity
Nathu Ram Mirdha	..	..	..	Agriculture, Animal Husbandry, Irrigation (Major, Medium, Minor and Flood Control) and Food
Harish Chandra	..	..	..	Public Works, Power, Industries and Civil Supplies and Printing Presses
B. K. Kaul	..	..	..	Finance, Excise and Taxation
Bheeka Bhai	..	..	..	Panchayati Raj, Community Development, Co-operation, Forests, Labour, Ayurveda, Relief and Rehabilitation
Barkatullah Khan	..	..	..	Medical, Public Health, Local Self-Government, Town Planning and Housing

Deputy Ministers

Daulat Ram	..	..	..	Major Irrigation, Local Self-Government and Ayurveda
Smt. Kamla Beniwal	..	..	..	Planning and Development, Agriculture and Animal Husbandry, Famine Relief and State Enterprises
Smt. Prabha Misra	..	..	..	Medical, Public Health, Social Welfare, Law and L.R.
Paras Ram Maderna	..	..	..	Power, General Administration, Relief and Rehabilitation and Judicial
Bhawani Shankar Nandwana	..	..	..	P.W.D., Labour, Panchayats and Community Development
Ram Prasad Ladha	..	..	..	Revenue, Devasthan and Mines
Chandan Maj Baid	..	..	..	Industries and Finance
Dinesh Rai Dangi	..	..	..	Medium and Minor Irrigation, Khadi and Village Industries and Small Savings
Niranjan Nath Acharya	..	..	..	Education, Forests, Excise and Taxation
Bhim Singh	..	..	..	Home, Transport and Co-operation

Chief Secretary

B. Mehta

HIGH COURT

<i>Chief Justice</i>	..	..	..	D. S. Dave
<i>Puisne Judges</i>	..	..	..	I. N. Modi, D. M. Bhandari, J. Narani, L. N. Chhangani, C. B. Bhargava, B. P. Beri, P. N. Singhal, V. P. Tyagi

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	..	..	..	V. V. Narlikar
<i>Members</i>	..	..	..	S. L. Ahuja, Shyam Lal, B. L. Rawat

LEGISLATIVE ASSEMBLY

Speaker : Ram Niwas Mirdha *Deputy Speaker* : Narain Singh

Mahaya : Mandhatta Singh (SWA)

Deputy : Vacant

BUDGET OF THE GOVERNMENT OF RAJASTHAN
(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corpora- tion Tax	3,93-00	4,79-95	4,33-91
Estate Duty	17-50	18-00	19-00
Land Revenue (net)	9,05-00	8,30-00	8,85-30
State Excise Duties	5,20-00	5,40-00	5,80-00
Stamps	1,74-00	1,43-00	1,45-00
Forest	90-00	80-28	86-23
Registration	16-00	16-00	17-00
Taxes on Vehicles	1,40-00	1,44-00	1,50-00
Sales Tax	8,62-00	9,60-00	10,25-00
Other Taxes and Duties	2,06-72	2,17-00	2,27-30
Irrigation, Navigation, Embankment and Drainage Works (net)	91-80	90-00	87-50
Debt Services	3,66-60	4,57-91	5,04-35
Civil Administration	3,69-05	3,90-55	4,53-75
Public Works and Miscellaneous Public Improvements (net)	67-33	62-64	84-30
Miscellaneous (net)	2,01-94	1,71-93	2,52-35
Contributions and Miscellaneous Adjust- ments between Central and State Govern- ments	19,67-96	21,47-29	20,73-81
Extraordinary	2,17-00	1,86-60	1,93-70
GRAND TOTAL—REVENUE RECEIPTS	66,05-90	69,35-65	72,18-50
REVENUE EXPENDITURE			
Direct Demands on the Revenue	3,94-88	4,12-27	4,14-46
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	1,10-97	1,31-15	1,32-03
Debt Services (net)	9,18-42	10,80-05	10,32-92
General Administration	2,58-85	2,59-50	2,77-94
Administration of Justice	62-67	62-84	66-89
Jails	35-68	36-19	37-93
Police	5,90-00	5,59-78	6,12-21
Scientific Departments	63-12	57-29	49-73
Education	13,93-99	13,78-43	14,83-84
Medical	4,06-27	4,05-01	4,53-66
Public Health	2,35-76	3,98-09	2,96-75
Agriculture	1,94-09	1,99-07	2,42-98
Animal Husbandry	1,19-33	1,29-82	1,80-72
Co-operation	71-89	72-56	77-36
Industries	41-12	38-11	54-90
Miscellaneous Departments	2,47-26	2,34-85	2,78-80
Public Works and Miscellaneous Public Improvements	5,58-50	5,94-81	5,95-41
Miscellaneous	5,21-82	5,48-32	6,61-33
Extraordinary, including Community Projects, NES and Local Development Works	3,89-07	3,77-96	3,31-03
GRAND TOTAL—EXPENDITURE ON RE- VENUE ACCOUNT	66,13-69	69,76-1	72,80-89
SURPLUS (+) DEFICIT (—) ON REVENUE ACCOUNT	(—)7-79	(—)40-45	(—)62-39

UTTAR PRADESH

Area : 1,13,654 sq. miles
Principal language : Hindi

Population : 7,37,46,401

Capital : Lucknow

Governor : Biswanath Das

COUNCIL OF MINISTERS

<i>Ministers</i>				<i>Portfolios</i>
Smt. Sucheta Kripalani	..	..	..	Chief Minister, General Administration (excluding Cultural Affairs and Scientific Research), Industries (including Village and Small-Scale Industries, Marketing of Cane and Gur Development), Planning (excluding Community Development, Panchayati Raj and P.R.D.), Information and Economics and Statistics
Hukam Singh Visen	..	..	..	Revenue, Security and Government Estate Office
Girdhari Lal	..	..	..	Irrigation and Power
Charan Singh	..	..	..	Agriculture, Animal Husbandry, Fisheries and Forests
Ali Zaheer	..	..	..	Justice, Legislative and Muslim Waqfs
Kamlapati Tripathi	..	..	..	Finance, Sales Tax, Registration, Stamps and Court Fees, Charitable Endowments and Sri Badrinath Temple
Hargovind Singh	..	..	..	Home (excluding Jails), Civil Defence and Home Guards
Muzaffar Hasan	..	..	..	Transport (including Tourism), and Political Pensions
Ram Murthi	..	..	..	Community Development, Panchayati Raj (including Village Panchayats, Zila Parishads and Kshettra Samities) and Prantiya Raksha Dal
Chaturbhuj Sharma	..	..	..	Local Self-Government, Municipal Housing (Scheme of Municipal and Improvement Trusts and Correspondence regarding Central Assistance) and Jails
Jagmohan Singh Negi	..	..	..	Food and Civil Supplies
Sita Ram	..	..	..	Social Welfare (including Juvenile Delinquency), Harijan Welfare, Cane Development, Scientific Research and Cultural Affairs (including Museums and Arts Colleges), Relief and Rehabilitation
Dau Dayal Khanna	..	..	..	Medical, Public Health and Excise
Banarsi Das	..	..	..	Co-operation, Labour and Parliamentary Affairs
Kailas Prakash	..	..	..	Education
Jagan Prasad Rawat	..	..	..	Public Works
<i>Deputy Ministers</i>				
Shanti Prapanna Sharma	..	..	..	Marketing of Cane and Gur Development
Baldeo Singh Arya	..	..	..	Information and Power; Agriculture and Forests
Jairam Varma	..	..	..	Judicial, Legislative and Finance
Ram Narain Pandey	..	..	..	Medical and Education
Shiva Prasad Gupta	..	..	..	Industries and Home
<i>Parliamentary Secretaries</i>				
Smt. Tara Agarwal	..	..	..	Local Self-Government, Social Welfare and Harijan Welfare
Hari Datt Kandpal	..	..	..	Civil Supplies and Transport
Ajal Kumar Basu	..	..	..	Irrigation, Public Works, Industries and Information

Banshidhar Pandey	Planning, Community Development and Panchayat Raj
Devendra Pratap Singh	Community Development, Co-operation, Labour and Transport
Ram Kumar Shastri	Revenue

Chief Secretary,

K. K. Dass

HIGH COURT

<i>Chief Justice</i>	M. C. Desai
<i> Puisne Judges</i>	V. Bhargava, N. Beg, V. G. Oak, J. Sahai, B. Dayal, J. N. Tarku, B. N. Nigam, S. S. Dhavan, S. K. Verma, W. Broome, D. S. Mathur, D. P. Uniya, S. N. Dwivedi, R. A. Misra, S. C. Marchandai, T. Ramabhadran, B. D. Gupta, K. B. Asthana, S. N. Katju, G. Kumar, R. S. Pathak, D. D. Seth, M. Chandra, M. H. Beg, R. N. Sharma, G. D. Sehgal, S. D. Khare, G. C. Mathur, G. Prasad, C. B. Kapoor, S. Chandra, H. C. P. Tripathi.
<i>Advocate-General</i>	K. L. Misra

PUBLIC SERVICE COMMISSION

<i>Chairman</i>	Radha Krishna
<i>Members</i>	R. D. Misra, R. P. Verma, J. N. Ugra, H. A. Siddiqi

LEGISLATIVE ASSEMBLY

<i>Speaker</i> : Madan Mohan Varma	<i>Deputy Speaker</i> : Hoti Lal Agarwal
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Mohan Lal Garj : Khayali Ram (PSP)
Shyam Dewra : Shibban Lal Saxena (Ind.)

<i>Chairman</i> : R. V. Dhulekar	LEGISLATIVE COUNCIL
	<i>Deputy Chairman</i> : Nizamuddin

Hayatullah Ansari	Legislative Assembly
Algurai	"
Kalyan Chand	"
Ram Prakash Gupta	"
Gopi Nath Singh	"
Smt. Rani Tandon	"
Shahid Fakiri	"
Beni Prasad Madhuv	"
Vasu Deo Misra	"
Ram Sagar	"
Chedilal Sathi	"
Smt. Savitri Shyam	"
Sita Ram	"
Balbhadra Prasad Bajpai	Teachers
Hari Raj Singh	"
Lallu Singh	"
Madan Mohan	Graduates
Ishwari Prasad	"
Jagar Nath	Local Authorities
Taj Bahadur	"
Raghuraj Singh	"
Nawab Singh	"
Mangala Prasad	"
Chiranjil Lal Paliwal	"
Birendra Bahadur Singh Chandel	"
Bihari Lal Vashist	"

BUDGET OF THE GOVERNMENT OF UTTAR PRADESH

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	14,48.44	17,45.86	16,10.54
Estate Duty	63.00	63.00	73.00
Land Revenue (net)	27,56.92	24,89.23	22,29.04
State Excise Duties	9,77.66	10,59.95	10,72.98
Stamps	5,30.10	4,90.00	5,10.00
Forest	8,20.62	9,04.57	9,93.93
Registration	79.77	81.76	85.67
Taxes on Vehicles	3,68.30	3,68.80	3,84.35
Sales Tax	16,07.50	16,98.35	18,19.02
Other Taxes and Duties	12,56.59	12,03.38	14,77.89
Irrigation, Navigation, Embankment and Drainage Works (net)	14,03.11	14,75.73	15,28.96
Debt Services	13,62.52	15,71.12	18,23.07
Civil Administration	15,61.10	14,37.76	17,34.52
Public Works and Miscellaneous Public Improvements (net)	82.05	84.70	80.40
Miscellaneous (net)	16,17.89	16,11.93	17,08.78
Contributions and Miscellaneous Adjustments between Central and State Governments	42,46.61	42,15.70	52,62.24
Extraordinary	0.01	1,22.08	0.07
GRAND TOTAL—REVENUE RECEIPTS	2,01,82.19	2,06,23.92	2,23,84.46
REVENUE EXPENDITURE			
Direct Demands on the Revenue	14,42.72	14,60.86	16,90.15
Revenue Account of Irrigation, Navigation, Embankment, and Drainage Works	19,16.92	21,09.77	20,48.58
Debt Services (net)	27,79.72	27,83.62	33,11.70
General Administration	11,33.37	10,59.71	10,84.87
Administration of Justice	2,02.06	2,06.45	2,13.21
Jails	1,54.30	1,61.19	1,73.11
Police	12,91.45	13,39.85	13,82.48
Scientific Departments	15.84	22.63	22.20
Education	27,85.75	28,65.97	33,77.61
Medical	6,33.15	6,23.37	7,33.93
Public Health	4,63.52	4,63.06	7,27.90
Agriculture	6,14.91	6,42.88	8,03.50
Animal Husbandry	2,64.04	2,66.40	3,98.21
Co-operation	2,41.68	2,27.15	2,45.80
Industries and Supplies	10,06.29	9,43.77	10,62.66
Miscellaneous Departments	8,42.19	8,13.18	11,66.77
Public Works and Miscellaneous Public Improvements	7,88.80	8,96.52	8,82.07
Miscellaneous	24,70.82	24,72.22	26,90.87
Extraordinary, including Community Projects NES, and Local Development Works	16,31.78	12,65.32	15,27.78
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	2,06,79.31	2,06,23.92	2,35,43.40
SURPLUS (+) DEFICIT (–) ON REVENUE ACCOUNT	(–)4,97.12	—	(–)11,58.94

WEST BENGAL

Area : 33,829 sq. miles
Principal language : Bengali

Population : 3,49,26,279

Capital : Calcutta

Governor : Km. Padmaja Naidu

COUNCIL OF MINISTERS

Ministers

Portfolios

Pratulla Chandra Sen	..	Chief Minister, General Administration, Political, Police, Defence, Special, Passport, Press, Home (Anti-corruption and Enforcements), Development, Food and Supplies, Agriculture and Health
Khagendra Nath Das Gupta	..	Public Works and Housing
Iswar Das Jalan	.. ..	Excise and Judicial and Legislative Departments
Rai Harendra Nath Chaudhuri	..	Education
Tarun Kanti Ghosh	.. ..	Cottage and Small-Scale Industries, Co-operation, Commerce and Industries
Smt. Parabi Mukhopadhyay	..	Health
Shyamadas Bhattacharyya	..	Land and Land Revenue
Jagannath Kolay	.. ..	Jails, Press and Passport Branches of the Home Department and Parliamentary Affairs
Saila Kumar Mukherjee	..	Transport Branch of the Home Deptt. and Finance
Smt. Abha Mahto	.. ..	Refugee Relief and Rehabilitation, Social Welfare, and Constitution and Elections Branches of the Home Department
S. M. Fazlur Rahman	..	Animal Husbandry and Veterinary Services, Local Self-Government
Bijoy Singh Nahar	.. ..	Labour and Publicity Branch of the Home Department

Ministers of State

Sourindra Mohan Misra	..	..	Education
Tenzing Wangdi	.. ..	..	Animal Husbandry and Veterinary Services and Tribal Welfare
Samarajit Bandopadhyay	..	..	Agriculture and Community Development
Arghendu Sekhar Naskar	..	..	Excise

Chief Secretary

R. Gupta

HIGH COURT

Chief Justice	..	..	..	H. K. Bose
Private Judges	..	..	..	P. B. Mukherjee, R. S. Bachawat, D. N. Sinha, P. N. Mukherjee, S. K. Sen, D. Mukherjee, G. K. Mitter, P. C. Mullick, S. K. Datta, U. C. Law, B. N. Banerjee, A. N. Ray, S. P. Mitra, S. K. Niyogi, D. N. Das Gupta, K. N. Sen, P. Chatterjee, A. C. Roy, C. N. Laik, B. Mukherjee, R. N. Dutt, D. D. Basu, B. C. Mitra, A. C. Sen
Advocate-General	..	..	..	S. M. Bose

PUBLIC SERVICE COMMISSION

Chairman	..	..	..	A. B. Chatterjee
Members	..	..	..	K. P. Sen, P. C. Rakshit

LEGISLATIVE ASSEMBLY

Speaker : Keshab Chandra Basu*Deputy Speaker* : Asutosh Mukherjee

20.	Arun Kumar Moitra	..	..	..	(Con.)	Siliguri
69.	Charu Shila Dhar	..	..	..	(Con.)	Bongaon
208.	Raj Rejeswari Prasad Singha Deo	..	..	..	(Con.)	Hura
217.	Manik Chandra Mukhopadhyay	..	..	..	(Con.)	Barjora
233.	Benoy Krishna Chaudhury	..	..	..	(Con.)	Burdwan

LEGISLATIVE COUNCIL

Chairman : Suniti Kumar Charterjee*Deputy Chairman* : Pratap Chandra Guha Roy

52.	Kishori Lal Dhandhanian	(Con.)	Elected by M. L. As.
Abdul Halim	..	..	Legislative Assembly
Snehangsu Kantacharya	..	..	"
Upendra Nath Burman	..	..	"
Sukumar Datta	..	..	"
Ismail Ibrahim	..	..	"
Nar Bahadur Gurung	..	..	"
Dhadjadhari Mandal	..	..	"
Vishwanath Mukherji	..	..	"
Nirmal Bose	..	..	"

BUDGET OF THE GOVERNMENT OF WEST BENGAL

(ON REVENUE ACCOUNT)

(In lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Taxes on Income other than Corporation Tax	12,50.80	14,97.00	13,44.33
Estate Duty	29.66	29.80	29.81
Land Revenue (net)	8,61.33	8,61.62	8,43.30
State Excise Duties	7,27.47	7,97.02	8,13.02
Stamps	5,48.49	5,37.47	6,13.83
Forest	1,60.24	1,91.13	2,07.53
Registration	85.98	1,06.73	1,08.71
Taxes on Vehicles	4,50.10	4,47.00	4,44.85
Sales Tax	24,42.26	31,30.21	32,70.21
Other Taxes and Duties	11,04.10	11,71.91	12,12.04
Irrigation, Navigation, Embankment and Drainage Works (net)	68.94	60.03	64.42
Debt Services	3,59.21	4,62.93	5,20.55
Civil Administration	8,92.07	8,54.49	9,32.04
Public Works and Miscellaneous Public Im- provements (net)	1,24.14	1,40.03	1,40.62
Miscellaneous (net)	3,06.33	2,72.14	3,04.82
Contributions and Miscellaneous Adjust- ments between Central and State Govern- ments	22,94.35	22,36.97	26,46.84
Extraordinary	—	12.16	—
GRAND TOTAL—REVENUE RECEIPTS	1,17,05.47	1,28,63.74	1,35,52.11
REVENUE EXPENDITURE			
Direct Demands on the Revenue	7,62.26	7,64.20	8,21.55
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works	3,22.68	3,03.75	3,53.40
Debt Services (net)	13,81.34	14,04.09	14,98.75
General Administration	3,56.00	3,76.40	3,78.35
Administration of Justice	1,34.30	1,49.22	1,50.29
Jails	1,07.91	1,14.64	1,13.48
Police	9,92.51	10,39.14	10,52.34
Ports and Pilotage	14.96	14.51	14.92
Scientific Departments	0.77	0.79	0.77
Education	19,40.92	22,76.24	22,26.89
Medical	8,00.46	8,77.41	9,22.28
Public Health	3,29.96	3,67.80	4,00.64
Agricultural and Fisheries	7,55.77	8,36.08	11,19.06
Animal Husbandry	96.17	98.52	1,56.50
Co-operation	84.09	70.72	86.52
Industries and Supplies	4,03.84	3,65.62	5,22.85
Miscellaneous Departments	4,69.08	5,23.44	6,17.29
Public Works and Miscellaneous Public Im- provements	6,47.08	6,18.44	6,47.37
Miscellaneous	10,39.79	15,19.23	13,67.68
Extraordinary, including Community Projects NES, and Local Development Works	3,38.90	3,63.07	5,50.02
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	1,09,78.79	1,20,83.31	1,29,90.95
SURPLUS (—) DEFICIT (—) ON REVE- NUE ACCOUNT	(+) 7,26.68	(+) 7,80.43	(+) 5,61.16

ANDAMAN AND NICOBAR ISLANDS

Area : 3,215 sq. miles

Population : 63,548

Headquarters : Port Blair

Chief Commissioner : B. N. Maheshwari

BUDGET OF THE GOVERNMENT OF ANDAMAN AND NICOBAR ISLANDS

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Land Revenue (net)	4.84	5.05	5.19
State Excise Duties	0.01	0.02	0.02
Stamps	0.43	0.44	0.45
Forest	1,14.60	1,18.29	1,32.68
Registration	0.01	0.02	0.02
Taxes on Vehicles	0.12	0.12	0.22
Other Taxes and Duties	0.21	0.21	0.21
Debt Services	0.47	0.33	0.43
Civil Administration	1.57	1.81	1.77
Miscellaneous (net)	53.79	55.84	56.13
Electricity Schemes	5.00	6.00	6.00
GRAND TOTAL—REVENUE RECEIPTS	1,81.05	1,88.13	2,03.12
REVENUE EXPENDITURE			
Direct Demands on the Revenue	1,10.24	1,26.73	1,17.79
Debt Services (net)			
General Administration	11.85	11.74	12.17
Administration of Justice	0.03	0.03	0.03
Jails	0.78	0.78	0.82
Police	25.04	27.64	27.11
Ports and Pilotage	56.40	77.97	64.67
Education	15.95	17.05	18.54
Medical	10.96	10.69	13.22
Public Health	3.16	3.45	5.24
Agriculture	16.24	13.15	13.45
Animal Husbandry	1.91	2.03	2.78
Co-operation	0.84	0.93	1.06
Industries	1.93	1.98	1.92
Miscellaneous Departments	19.39	18.07	22.24
Public Works and Miscellaneous Public Improvements	6.86	7.41	8.64
Miscellaneous	9.50	9.20	8.84
Extraordinary, including Community Projects, NES and Local Development Works	4.26	3.76	7.85
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	2,95.34	3,32.61	3,26.37

DADRA AND NAGAR HAVELI

Area : 189 sq. miles

Population : 57,963

Headquarters : Silvassa

BUDGET OF THE GOVERNMENT OF DADRA AND NAGAR HAVELI

(ON REVENUE ACCOUNT)

(in lakhs of rupees)

	Budget Estimates 1963-64	Revised Estimates 1963-64	Budget Estimates 1964-65
REVENUE RECEIPTS			
Land Revenue (net)	0.98	0.98	0.98
State Excise Duties	4.00	4.92	4.92
Stamps	0.13	0.13	0.13
Forest	10.25	5.25	7.14
Registration	—	0.04	0.01
Debt Services	0.03	0.07	0.09
Civil Administration	1.44	0.87	0.32
Public Works	0.10	0.10	0.10
Miscellaneous (net)	0.33	0.28	0.13
Electricity Schemes	0.15	0.15	0.15
GRAND TOTAL—REVENUE RECEIPTS	17.41	12.79	13.97
REVENUE EXPENDITURE			
Direct Demands on the Revenue	3.52	3.52	3.86
General Administration	1.42	1.33	1.42
Administration of Justice	0.24	0.22	0.30
Jails	0.09	0.15	0.12
Police	1.95	1.37	1.42
Education	2.33	2.74	2.91
Medical	0.37	0.43	0.39
Public Health	0.28	0.12	0.23
Agriculture	0.25	0.13	0.25
Animal Husbandry	0.10	0.08	0.10
Co-operation	0.08	0.01	0.16
Industries	—	0.01	0.03
Miscellaneous	0.69	1.56	1.78
Extraordinary, including Community Projects, NES, and Local Development Works Multi-purpose Irrigation and Electricity Schemes	2.50	2.20	5.56
	0.25	0.20	0.25
GRAND TOTAL—EXPENDITURE ON REVENUE ACCOUNT	14.07	14.07	18.78